The Acquisition of Tacit Knowledge in International Outsourcing Relationships The Malaysian Supplier Perspective

Md Saad, Norsafinas

Awarding institution:
King's College London

Title: The Acquisition of Tacit Knowledge in International Outsourcing Relationships
The Malaysian Supplier Perspective

Author: Norsafinas Md Saad

The Acquisition of Tacit Knowledge in International Outsourcing Relationships: The Malaysian Supplier Perspective

A thesis submitted by

NORSAFINAS MD SAAD

In fulfillment of the requirement
for the degree of Doctor of Philosophy in Management

Department of Management
School of Social Science & Public Policy

KING'S COLLEGE LONDON

2012

ABSTRACT

Tacit knowledge has been acknowledged to be a strategic source of sustainable competitive advantage. Thus, there is a great urgency for a firm to accumulate a stock of tacit knowledge. The acquisition of tacit knowledge through relationships with foreign business partners is deemed significant in increasing a firm's competitiveness as it allows the firm to access not only tacit knowledge but other idiosyncratic resources belonging to its partners. A manufacturing supplier who engages in international outsourcing relationships can use the opportunity provided by collaborating with its foreign buyers to obtain tacit knowledge that is new and valuable to it. Once the external tacit knowledge is assimilated and applied within the supplier firm, its level of competency and business opportunities are expected to increase. Using survey data from 122 Malaysian manufacturing suppliers, this study attempts to analyze the effects of absorptive capacity and relational capital components on the Malaysian suppliers' acquisition of tacit knowledge from their international outsourcing relationships. It also investigates the implications of the newly acquired tacit knowledge in enhancing the suppliers' capabilities and opportunity recognition.

Three important absorptive capacity components of prior related knowledge, business relatedness and interactive involvement have been identified as important in facilitating the supplier's learning process. From the relational capital perspective, this study examines the roles of trust, interaction and cultural sensitivity play in the supplier's tacit knowledge acquisition. In reference to the absorptive capacity, the findings reveal that the interactive involvement appears to be the most critical factor, while prior related knowledge is not significantly related to the success of tacit knowledge acquisition. As for the relational capital, interaction and cultural sensitivity positively influence the supplier's tacit knowledge acquisition. Contrary to the arguments in the literature, trust turns out not to be significant. Finally, the results provide evidence that the tacit knowledge acquired via international outsourcing relationships significantly enhances the Malaysian suppliers' capabilities and opportunity recognition.

ACKNOWLEDGEMENTS

First and foremost, I would like to thank Allah SWT for giving me the strength and determination to complete this thesis. I also wish to express my heartfelt gratitude to my supervisor, Professor Pervez Ghauri, for his guidance and advice throughout my entire doctoral experience. I feel very fortunate to have the opportunity to work with him and benefit from his invaluable insights and expertise. I am forever indebted to him for steering me this far. I would also like to thank Professor Rudolf Sinkovics for his interesting views and observations. I owe special thanks to Professor Marjorie Lyles (Indiana University) and Dr. Axele Giroud (University of Manchester) for their constructive and detail feedbacks that greatly improve the whole content of my questionnaire. I am also deeply grateful to both examiners for providing constructive comments and clarifying suggestions. In particular, I thank Prof. Mo Yamin for his intriguing perspectives on the areas that I have overlooked. I also have to thank Dr. Peter Trim for his extensive comments that help to enrich my thesis.

My deepest gratitude extends to the Malaysian Ministry of Higher Education and University Utara Malaysia for giving me the financial support and opportunity to pursue my doctoral degree. I would like to express my appreciation to the respondents from selected Malaysian manufacturing firms. It would have been impossible to complete this thesis without their participation and commitment. My big thanks also go to my English teacher for many years, Hasnah Ishak, for proofreading and editing my thesis. To my brothers and sisters, thank you so much for helping me in so many ways during this whole process. Most importantly, I want to thank my beloved husband, Mohd Haniff Jedin, for his incredible love, patience, support, encouragement and tolerance throughout my PhD journey. He always believed in my ability to complete my doctoral studies, even when I doubted myself. To my lovely children, Adam Azzikri, Sarah Hani Sufiyyah and Sarah Delia Suriyya, thank you so much for being so supportive and understanding of mama's work situation. This thesis is dedicated to my parents, Norma Chin and Md Saad Sheriff, to whom I am deeply grateful for their unending love and moral support. Thank you for always being there for me.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.1 Overview

The importance of tacit knowledge to a firm's competitive edge has received an increasing amount of attention in recent years. One of the reasons behind this reality is that tacit knowledge has been acknowledged as a firm's valuable resource that is difficult for competitors to replicate, and has thus been recognized as a means of creating and sustaining competitive advantage (Ambrosini and Bowman 2001; Berman et al. 2002). Due to this fact, there is a great urgency for a firm to accumulate a stock of tacit knowledge, either internally or externally. Although both approaches are essential in generating and expanding a firm's knowledge, the gathering of tacit knowledge through relationships with business partners is deemed a substantial part of a firm's competitiveness as it allows the firm to gain easy access to the partner's operational and managerial strategies.

In international business, a supplier who engages in international outsourcing partnerships, can use the opportunity of working and interacting with foreign buyers to gain tacit knowledge that is new and valuable to the supplier. Once the external tacit knowledge is assimilated and applied within the supplier firm, its capabilities and business opportunities are expected to increase, granting the firm to a better position. Therefore, it is of paramount importance to investigate the factors that influence the acquisition of tacit knowledge from international outsourcing relationships and the

implications such tacit knowledge may have for the supplier firms. In general, this chapter provides an overview of the entire study and information concerning the issue of tacit knowledge acquisition. Research problems describing why the current study is needed will also be presented. The research questions and objectives will be brought into focus, followed by the significance of the study. Lastly, the definitions of all the key terms and variables used in this study and a description of the organization of the whole thesis will be also provided in this chapter.

1.2 Background of the Study

The impact of globalization in the new global economic system has created various opportunities and challenges for companies and countries. To some extent, this phenomenon has caused spectacular changes in business activities and strategies around the globe. For instance, traditionally companies have produced and sold their products locally. However, as local markets are saturated and resources become scarce, slimmer market share and insufficient supply have forced some companies to opt for alternative business strategies to secure their longevity. In some instances, companies have responded by extending their businesses to other countries and exploring new sources overseas. Seeking out new markets and resources across national boundaries is considered a typical way of dealing with the limited local demand and supply.

In addition, in response to the stiff competition that has driven down production costs and boosted competitiveness, international companies are also spreading their procurement activities across geographical boundaries (Kotabe and Murray 1990), in an

effort to hire top quality suppliers and reduce their production expenditure (Bryce and Useem 1998; Kaufman et al. 2000; Mol et al. 2004). This particular business tactic, which is known as international outsourcing, is a well-known and growing strategic approach in international business. It has long been adopted by many multinationals, including IBM, Samsung and Honda, as a means of cost reduction (Doh 2005; Maskell et al. 2007) and in response to competitive pressures (Hendry 1995). A classic example of international outsourcing can be seen in the case of Mattel, based in the United States of America (USA). Its first Barbie dolls, which debuted in 1959, were initially manufactured in Japan (Barboza and Story 2007).

Besides providing strategic and operational advantages to the buying firms, international outsourcing also provides the suppliers with economic benefits and significant opportunities. From a supplier's perspective, the partnership gives the supplier access to its foreign buyer's resources, expertise and business networks. This access is granted to the supplier given that it needs certain important information from the buyer in order to execute the outsourcing contract effectively. As a result, the supplier not only fulfills its transaction obligation, but at the same time can exploit the accessibility to gain new knowledge and technology for its future improvement (Bhatt 2000).

Since knowledge, and particularly tacit knowledge, has been recognized as a firm's most substantial source of competitiveness (Grant 1996a; Nonaka et al. 2000a), it can be postulated that the acquisition of new and important knowledge from external sources is critical for a supplier aiming to compete in a turbulent business environment. This is

especially true in the current era of intense global competition, rapid technological change and fast-paced information technology development, where only competent and proactive suppliers will survive and prosper. The experience of working with foreign buyers is seen as a precious opportunity for international outsourcing suppliers to obtain the tacit elements of valuable knowledge and use them to enhance their capabilities and overall business performance.

1.3 Research Motivation

Pressured by market forces to reduce costs, many foreign firms have moved some of their manufacturing activities to Asia. Outsourcing of business activities in India, China and other low cost countries, including Malaysia and Thailand, has continued to grow at an astonishingly rapid pace. India, for example, has made foreign outsourcing a government priority and have set up agencies to ease the transition of foreign firms into the Indian outsourcing markets (Schniederjans and Zuckweiler 2004b). Other Asian countries, such as Malaysia, Singapore and Taiwan, are also proving that they have access to the latest technology and skilled workers. Malaysia, in particular, has made an impressive effort to maintain its social, economic and political stability. These factors have contributed a great deal in attracting international outsourcing contracts, as well as investments, from foreign companies. Furthermore, a good infrastructure and educated workforce add value and boost Malaysia's business positioning as an international outsourcing location.

From the year 2003 up until 2008, Malaysia was ranked by AT Kearney, a management consultant firm, as the third most attractive offshoring destination, behind India and China (Angelina 2005; Lian 2005). This position remains unchanged until 2011 (AT Kearney 2011; Murugiah 2011). India came out on top because of its cost advantages, international outsourcing experience and skilled labor, while China took the second spot as a result of its large pool of educated workers and low costs. However, although India and China are ranked the top, they involve higher political and economic risks, as well as weak infrastructures and unresolved intellectual property issues.

In contrast to the uncertain internal and external environmental conditions in China and India, the managing director of AT Kearney Malaysia has pointed out that Malaysia's well-developed infrastructures, attractive business environment and strong government support have made it a close alternative to India and China. Responding to this scenario, in September 2004, at the launch of the 8th MSC-IAP Business Summit, the then Prime Minister of Malaysia, Dato' Seri Abdullah Ahmad Badawi, urged Malaysian industries to move quickly and take advantage of international outsourcing activities (Utusan Malaysia, 2004). He advised Malaysian suppliers to boost the quality of their products and services amid stiff regional competition. This is important because the country will depend heavily on these suppliers to build a stronger presence and brand name among potential foreign firms. In addition, the experience and new knowledge they will learn from international outsourcing relationships could improve the country's competitiveness and productivity.

Inspired by the fact that Malaysia is among the world's three most attractive outsourcing locations, this study sets out to investigate whether the Malaysian suppliers benefit from such business relationships and what they gain, besides monetary returns, from producing or assembling products for their foreign buyers. Questions such as these led to an article entitled 'Routes to Technological Learning and Development: An Assessment of Malaysia's Innovation Policy and Performance' by Tidd and Brocklehurst (1999), which includes a brief discussion of Malaysia's industrialization, technological development and manufacturing industry. What caught the attention was the issue of whether the government's industrialization efforts are promoting the transfer of technology and market know-how from foreign to local companies.

It seems that some Malaysian suppliers are performing international outsourcing contracts, but they are simply carrying out their ongoing traditional tasks without realizing the importance of the new external knowledge, particularly tacit knowledge, that can be acquired through their relationships with foreign buyers. Despite government efforts and the presence of intermediary support organizations, manufacturers have largely failed to make the transition to the higher value-added activities of research and development (R&D) and design (Mansur 2005). Even though a handful of firms have made the transition, acquiring tacit knowledge through international outsourcing collaborations is still a challenge for Malaysian manufacturing suppliers. As such, one of the main motivations for conducting this study is to find out whether the Malaysian manufacturing suppliers gain new knowledge from this business relationship while working to fulfill their foreign buyers' expectations. Moreover, in order to provide

evidence about the Malaysian suppliers' competitiveness, it is crucial to investigate whether the new knowledge learned through the outsourcing relationships significantly enhances their capabilities.

The decision to focus on tacit knowledge acquisition in particular, was motivated by the lack of empirical evidence on the interorganizational learning of this specific type of knowledge, especially in the context of international business and buyer-supplier relationships. In this case, there is a need for Malaysian manufacturing suppliers to gain tacit knowledge from the international outsourcing relationship since it is a critical part of suppliers to fulfill the buyers' expectations and requirements. There are situations where the buyers must provide the suppliers with practical guidance and technical training so that the components or final products will turn out as expected. In fact, foreign buyers with superior manufacturing capabilities can be a source of improved competency for local suppliers. This is particularly true when foreign companies transfer tacit knowledge to and share inputs with their suppliers in the form of production, technology or ideas that will help them to produce better quality products. The acquisition of tacit knowledge by the Malaysian suppliers will be more effective when the foreign buyers help the suppliers by showing them how product quality and production processes can be improved.

1.4 Research Problem

The outsourcing strategy has received attention from companies and researchers (Harland et al. 2005; Lankford and Parsa 1999; Weidenbaum 2005). This is because

many people believe the strategy to be the trend of the future and that it has a positive impact on a company's profits. According to Lankford and Parsa (1999), it was estimated that every Fortune 500 company had considered outsourcing at one point or another throughout the decade and 20 percent of them had entered into a contract by the end of the decade. This trend is now poised to move onto the international platform as many are recognizing the advantages of location economies, that is economies that arise from performing a value-creating activity in the optimal location for that activity, wherever in the world that might be (Hill 2009). This means that locating a value-creating activity in the optimal location for a particular business activity can lower the cost of value creation and help a company to achieve a low-cost position.

For all these reasons, international outsourcing has received significant interest from business press and academic researchers over the last few years (Elmuti and Kathawala 2000; Jones et al. 2005; Lyons 2001; Mol et al. 2005; Weidenbaum 2005). Their work mainly explores the trends in international outsourcing, the reasons for pursuing the strategy, its pros and cons and also its impact on a company's performance. This shows that various issues in international outsourcing from the perspective of the foreign buyers have been investigated. However, it turns out that so far very little research has been done looking sufficiently and deeply at the issue from the perspective of the international outsourcing suppliers. Since the supplier's view, including their view on knowledge acquisition, typically receives less attention from researchers, Moreira (2009) suggests that business relationships and knowledge flow between suppliers in 'less-favored regions' and their foreign buyers should be examined.

In addition, despite its potential strategic and financial impact, international outsourcing remains a somewhat neglected phenomenon in the empirical purchasing and supply chain literature (Petersen et al. 2000) and has often been considered an off-center topic in the international business literature (Buckley 2002; Murray 1995). Even when available, empirical insights (Bertrand 2010; Maskell et al. 2007; Mol et al. 2004; Murray 1995) are mostly focused on international outsourcing activities from the perspective of the developed countries and the buying firms. For example, Bertrand (2010) investigates the effect of international outsourcing on export performance from the standpoint of the French firms, who in this case are the buying firms, while Mol et al. (2005) analyze the reasons and performance implications of international outsourcing based on the opinions of the outsourcers in the Netherlands. In fact, most journal articles (Ang and Inkpen 2008; Gupta and Mukherji 2007; Jahns et al. 2006; Murray et al. 2009), that integrate outsourcing and international business, largely rely on conceptual arguments and propositions. As a result, there are hardly any empirical studies that investigate the strategic issues of international outsourcing and interorganizational learning in developing countries, specifically in the South East Asian (ASEAN) region. Thus, this study attempts to focus empirically on learning in the context of international manufacturing suppliers in Malaysia.

From the knowledge management and learning perspective, knowledge is often conceptually categorized into tacit and explicit forms (Becerra et al. 2008; Nonaka 1994). Tacit knowledge is intuitive, unarticulated (Cavusgil et al. 2003; Lam 2000; Polanyi 1967) and abstract (Dhanaraj et al. 2004). As a result of complicated qualities,

tacit knowledge is hard to codify (Hennart 1988; Kim 1997), document (Subramaniam and Venkatraman 2001) and share (Inkpen 1998; Nonaka 1994). Its vague and intense characteristics could be the reasons why researchers are less interested to empirically explore tacit knowledge and its implications on firm performance. Instead, studies on tacit knowledge commonly depend on conceptual and descriptive analyses (Cavusgil et al. 2003). In contrast to tacit knowledge, explicit knowledge is a form of knowledge that can be articulated (Nonaka and Takeuchi 1995), drawn and written down (Grant 1996a; Nonaka and von Krogh 2009). As a result of its unambiguous features, this type of knowledge is easier to learn or transfer (Hau and Evangelista 2007), compared with tacit knowledge.

Another research limitation identified in the previous research is that even though there is a clear distinction between tacit and explicit knowledge, empirical research to date has largely only explored the acquisition of general knowledge (Thuc Anh et al. 2006). For instance, there are several studies published by interorganizational learning researchers that look into general knowledge acquisition (Lyles and Salk 1996; Richards and De Carolis 2003; Si and Bruton 2005; Tsang et al. 2004; Verwaal et al. 2008), and most have focused on the specific context of the international joint venture (IJV). Alternatively, other related studies analyze both tacit and explicit knowledge by treating them as two different constructs (Becerra et al. 2008; Dhanaraj et al. 2004; Hau and Evangelista 2007). These research trends indicate that regardless of its competitive value, not many studies have been conducted to focus only on tacit knowledge acquisition.

Howells (1996) admits the fact that the study of tacit knowledge is insufficient and has been somewhat ignored. This is most likely because its learning involves obscure and unstipulated processes. As a result, only limited quantitative research (Athanassiou and Nigh 2000; Cavusgil et al. 2003; Yang and Farn 2009; Yin and Bao 2006) has been devoted to scrutinizing the determinants and importance of the acquisition of tacit knowledge. In fact, none of these studies incorporate both tacit knowledge and international outsourcing themes. In addition, quantitative study of the significance of tacit knowledge in the international setting is still lacking (Subramaniam and Venkatraman 2001). Due to these research gaps, there is a critical need to undertake this investigation, which gives special attention to tacit knowledge alone in order to empirically discover the drivers that lead to its acquisition and the outcomes it could potentially bring to Malaysian international outsourcing suppliers.

The next motivation for conducting this study is related to the important role tacit knowledge plays as a basis of a firm's competitiveness. Many scholars concur that tacit knowledge is a strategic source of a firm's competitive advantage (Alonderiene et al. 2006; Berman et al. 2002; Grant 1996a; Lubit 2001; Spekman et al. 2002) and performance (Ambrosini and Bowman 2001, Barney 1991). However, their ideas are mostly limited to theoretical arguments and propositions. Moreover, very little is known about whether the acquired tacit knowledge is in fact related to the improvement in a firm's performance, specifically in terms of its capabilities and potential opportunities. Although tacit knowledge is commonly speculated to benefit the firm's capabilities, empirical evidence confirming this inference is still scarce (Subramaniam and

Venkatraman 2001). To date, only a couple of studies have hypothesized the relationship between the acquisition or transfer of tacit knowledge and capability. However, rather than a wider perspective, their analyses are primarily centered, either on a certain type of tacit knowledge or a specific capability. For example, Subramaniam and Venkatraman (2001) explored the transfer and deployment of tacit overseas knowledge in relation to new product development capability, whereas Cavusgil et al. (2003) provide evidence of the impact of tacit knowledge transfer on innovation capability. Of these two studies, only the work of Subramaniam and Venkatraman (2001) evaluates the link between the two constructs in an international business context. Given the lack of empirical investigations concerning the limitations previously mentioned, the current study sets out to address the issue of tacit knowledge acquisition and its implications, and hence verify whether its acquisition through an international partnership could actually enhance the receiver firm's capabilities and business opportunities.

1.5 Research Questions

1. Is the tacit knowledge of the foreign buyers' requirements being acquired by the Malaysian suppliers?
2. What are the critical elements that contribute to the Malaysian suppliers' tacit knowledge acquisition from their international outsourcing relationships?
3. What benefits does the tacit knowledge acquired provide to the Malaysian suppliers?
4. What are the consequences of relational capital for the Malaysian suppliers' opportunity recognition?

Research Question 1: Is tacit knowledge of the foreign buyers' being acquired by the Malaysian suppliers?

The purpose of this question is to find out whether the Malaysian suppliers are actually gaining tacit knowledge about what their foreign buyers require from the business relationship or simply performing normal international outsourcing activities. In some cases, a Malaysian supplier may depend heavily on its foreign buyer to provide the product design and equipments necessary to perform the outsourcing project, thus limiting the amount of effort the supplier must contribute in terms of additional value-added activities (Tidd and Brocklehurst 1999). This reliance will actually reduce the local supplier's opportunity to obtain new and valuable tacit knowledge from the foreign partner. Basically, tacit knowledge is knowledge that is nonverbalized, intuitive and unarticulated (Polanyi 1967). In contrast to explicit knowledge, which can be learned from formulae, textbooks or technical documents (Ching Chyi and Jie 2000; Lee and Yang 2000), tacit knowledge can only be acquired through practical experience, learning-by-doing and close interaction between the knowledge transferor and acquirer (Lam 2000). Therefore, the acquisition of such abstract and personally-embedded knowledge is not an easy process.

Research Question 2: What are the critical elements that contribute to the Malaysian suppliers' tacit knowledge acquisition from their international outsourcing relationships?

The attributes mentioned here relate to the critical factors that influence the Malaysian suppliers' tacit knowledge acquisition. Conceptually, it could be argued that the

acquisition of external knowledge depends highly on the ability of a supplier to recognize, assimilate and utilize (Lane and Lubatkin 1998) the new knowledge, including tacit knowledge, that it has learnt about its foreign buyer's requirements. These abilities are captured in the theory of absorptive capacity (Cohen and Levinthal 1990), which is interpreted in the current study based on the supplier's prior related knowledge, business relatedness and interactive involvement.

Likewise, it has been acknowledged that tacit knowledge has a personal quality (Nonaka 1994), thus relational factors such as close interaction and trust are crucial requirements for the acquisition of this type of knowledge (Collins and Hitt 2006; Lam 2000). In addition to these factors, Dhanaraj et al. (2004) provide evidence that other relational dimensions such as trust and strong partnership ties are important elements in enhancing the success of tacit knowledge acquisition in IJVs. However, the current study will explore the effect of the relationship aspect on the Malaysian suppliers' acquisition of tacit knowledge based on trust, interaction and cultural sensitivity. Since most empirical studies analyze the topic of knowledge acquisition from the IJV standpoint (Dhanaraj et al. 2004; Lyles and Salk 1996; Park 2010; Thuc Anh et al. 2006), this study will identify the major factors that influence the acquisition of tacit knowledge in international outsourcing relationships.

Research Question 3: What benefits does the tacit knowledge acquired provide to the Malaysian suppliers?

This research question is raised for the purpose of examining the outcomes of tacit knowledge acquired by Malaysian suppliers. It is argued that the tacit knowledge acquired by the local suppliers via buyer-supplier relationships will enhance both the capabilities and opportunity recognition of the suppliers. A firm's capabilities can be defined as the complex routines that allow a firm to physically transform inputs into outputs in an efficient manner (Collis 1994). In line with this definition, a Malaysian supplier firm's capabilities are enhanced if it has the ability to effectively integrate internal and external knowledge and competences in order to grow and survive, while at the same time achieving congruence with the changing business environment (Grant 1996a; Teece et al. 1997). A firm with strategic capabilities is expected to facilitate the identification of other potential opportunities, which in turn could possibly allow the Malaysian supplier and its outsourcing foreign partner to establish joint product development, increase investment in the relationship and engage in other business relationships connected to the network (Holm et al. 1996).

Research Question 4: What are the consequences of relational capital for the Malaysian suppliers' opportunity recognition?

The reason for addressing this question is to analyze the importance of the relational capital in terms of the Malaysian suppliers' opportunity recognition. The question is considered from the perspective of future opportunities that are expected to evolve when a local supplier and its foreign buyer develop a good relationship based on trust,

interaction and cultural sensitivity. From another standpoint, relational capital emerges through a history of interactions between two business partners (Tsang et al. 2004). As emphasized in this study, the relational capital can be developed through social embeddedness between the Malaysian suppliers and their foreign buyers. Meanwhile, Eckerd and Shane (2003, p.336) refer to opportunities as the 'situations in which new goods, services, raw materials, markets and organizing methods can be introduced through the formation of new means, ends or means-ends relationship'. They involve the identification of potential opportunities, such as new business relationships and markets (Andersson et al. 2005a), which will be likely to materialize as a result of tacit knowledge acquisition and relational capital establishment.

1.6 Research Objectives

This research aims:

1. To identify whether the Malaysian suppliers are able to gain tacit knowledge while fulfilling the outsourcing obligations for their foreign buyers.
2. To examine the key elements of absorptive capacity and relational capital that influence the process of tacit knowledge acquisition by Malaysian suppliers from their international outsourcing relationships.
3. To analyze the implications of tacit knowledge acquisition for the Malaysian suppliers' capability enhancement and opportunity recognition.
4. To investigate the impact of relational capital on the Malaysian suppliers' recognition of opportunities.

1.7 Significance of the Study

Most of the international outsourcing studies so far have concentrated on the perspective of the international outsourcing companies. Only a few of them have made an attempt to study why the suppliers got involved in these international business relationships, what were the elements of their success, how they secured their partnerships and what they expected from these international alliances (Liu 2005; Yin and Bao 2006; Yli-Renko et al. 2001). These researchers have specifically paid attention to how the suppliers gained knowledge, what kind of knowledge they were seeking, whether they exploited new knowledge to improve their performance and whether they applied it to meet their buyers' expectations.

Few studies have examined the factors that influence knowledge acquisition and its effects on firm and alliance performance. For example, there are some studies (Dhanaraj et al. 2004; Lane et al. 2001; Thuc Anh et al. 2006; Tsang et al. 2004) linking the predictors of knowledge acquisition to the impact on IJV performance, while other studies examine the outcome of knowledge acquisition in terms of firm performance (Liu 2005; Presutti et al. 2007; Yli-Renko et al. 2001). Concerning tacit knowledge, despite its importance, only a few studies examine this perspective empirically (Yin and Bao 2006). For instance, Cavusgil et al. (2003) analyze the effect of tacit knowledge transfer on firm innovation capability, Dhanaraj et al. (2004) investigate the influence of tacit and explicit knowledge on IJV performance and Yin and Bao (2006) explore the impact of tacit knowledge on a firm's general performance. Yet, none of these studies specifically showed the implications of tacit knowledge for suppliers' capability and

extend this construct to other firm's outcomes, such as suppliers' future opportunities. Moreover, to date, there has been no investigation into tacit knowledge acquisition in international outsourcing in Malaysia. Therefore, this study attempts to discover the potential and beneficial impacts of foreign buyers' expertise on Malaysian local suppliers through the acquisition of knowledge, specifically tacit knowledge. In addition, this study aims to extend the analysis of the consequences on firm performance of the acquisition of tacit knowledge to include the supplier's opportunity recognition. The introduction of opportunity recognition as a new and important effect of tacit knowledge acquisition will require the integration of the entrepreneurship perspective with knowledge management and other critical literatures.

1.8 Scope of the Study

Generally, this study will be approached from the Malaysian supplier's point of view. It aims to uncover the critical elements that influence the acquisition of tacit knowledge and the implications of that knowledge for the supplier's capabilities and recognition of future opportunities. Thus, the tacit knowledge acquirers in this study are the Malaysian local suppliers, who are involved in international outsourcing arrangements by supplying and producing components, semi-finished or finished products to foreign buyers. This group was specifically chosen since the present study focuses on buyer-supplier collaboration in international outsourcing. All sizes of Malaysian manufacturing suppliers along the supply chain within the manufacturing industries, particularly those who involved in export activities, are included in the sampling frame.

The manufacturing industry is specifically targeted due to its pivotal contribution to Malaysian economic growth. However, only four manufacturing subsectors are selected based on their importance to the Malaysian manufacturing industry, which include electrical and electronics (E&E), chemicals and petroleum, machinery and equipment and automotive. On the other hand, the knowledge transferors are the foreign buyers, i.e. foreign international companies, who outsource the manufacture of their components or finished products to the Malaysian manufacturing suppliers. In terms of the unit of analysis, this study primarily explores the acquisition of tacit knowledge in international outsourcing at the organizational level. In summary, the sample companies to be included in the data analysis are selected according to the following selection criteria:

- Malaysian manufacturing suppliers.
- Represent any of the following main manufacturing industries: electrics and electronics, chemicals and petroleum, machinery and equipment and automotive industries.
- Assemble or manufacture parts or finished products for foreign companies.
- Export components or finished products to foreign countries.

1.9 Defining the Key Concepts

Table 1.1 specifies the operationalization of the key terms used throughout this study. The sources of the definitions are also included in the table.

Table 1.1 Definitions of Terms

Key Terms	Operationalization	Adapted/Modified from
Tacit knowledge	Accumulated knowledge, experience and skill that suppliers obtain from their foreign buyers when they interact, communicate, socialize and work with them. It cannot be learned and acquired through any written form. It can only be learned through observation, work experience and learning-by-doing.	(Cavusgil et al. 2003; Howells 1996; Kim 1997; Lam 2000; Marianna and Kalotina 2007; Polanyi 1966)
International outsourcing	An international business practice where a firm in one country buys components or finished products from a supplier or from a firm that assembles them in another country.	(Mol et al. 2005; Monczka and Trent 1991; Murray 1995)
Absorptive Capacity	A firm's ability to recognize the value of new and external knowledge, assimilate and commercialize it for end products.	(Cohen and Levinthal 1990)
Prior related knowledge	Employee's basic knowledge, skills and ability to understand and value new external knowledge.	(Lane and Lubatkin 1998; Minbaeva et al. 2003)
Business relatedness	The extent to which the suppliers and their foreign buyers are engaged in similar businesses.	(Richards and De Carolis 2003)
Interactive involvement	Knowledge acquisition methods employed by or accessible to a supplier in its effort to capture tacit knowledge from the foreign buyer.	Developed for this study
Relational Capital	The relationship that is positively developed through social embeddedness between outsourcing suppliers and their foreign buyers.	(Tsang et al. 2004)
Trust	The degree to which buyers and suppliers perceive each other as credible and benevolent.	(Doney and Cannon 1997)

Interaction	Behavioral actions and social relationships between a supplier and its foreign buyer.	(Larsson et al. 1998; Nahapiet and Ghoshal 1998; Yli-Renko et al. 2001)
Cultural sensitivity	A supplier's awareness of the differences between its foreign buyer's and its own national business cultures, and its ability to approach, adapt to and manage these differences.	(Johnson et al. 1996; LaBahn and Harich 1997)
Capability enhancement	The supplier's ability to effectively integrate internal and external knowledge and competencies in order to grow and survive, while also keeping pace with the changing business environment.	(Gold et al. 2001; Grant 1996a; Teece et al. 1997)
Opportunity recognition	The outsourcing supplier's discovery of a route for creating potential new businesses and possibilities for enhancing its current business position and profits.	Developed for this study

1.10 Organization of Chapters

This study is organized into six chapters. A brief explanation of each chapter is presented as below:

Chapter One: Introduction – describes the background and research problem for the present study, the research purpose and its potential significance for research and practice. Four research questions generated from the research problem are then addressed. The operationalization of the key terms used frequently throughout the thesis follows and the chapter closes with a brief conclusion.

Chapter Two: Literature review – discusses the literature on relevant theories, interorganizational learning and the main variables, such as absorptive capacity, relational capital, tacit knowledge acquisition and supplier outcomes. The six critical elements, namely prior related knowledge, business relatedness, interactive involvement, trust, interaction and cultural sensitivity speculated in the current study to be the strategic determinants of tacit knowledge acquisition are discussed in detail. A theoretical model with hypothesized relationships is illustrated at the end of the chapter.

Chapter Three: Methodology – justifies an inclusive plan to empirically evaluate the hypothesized relationships. It then proceeds to the research design and sampling procedures. Measurement development and the issues of reliability and validity are also emphasized in this chapter. It concludes with the recommendation of the most appropriate statistical technique for the data analysis.

Chapter Four: Results and findings – details the data analysis procedure for the hypothesis testing. This chapter includes information about the sample characteristics and the results of the validity and reliability assessment. Finally, the results of testing the hypothesized relationships are presented.

Chapter Five: Discussion – presents the interpretation and detailed discussion of the research findings of the current study. Comparisons are made to determine the similarities and differences between the present research findings and those of previous related works.

Chapter Six: Conclusion – elaborates the implications of this study from the perspectives of theory and practice. It also provides the limitations of the study and makes recommendations for future studies. Finally, it gives an overall conclusion of the present study.

1.11 Conclusion

As competition has become increasingly knowledge-based, firms must double their efforts to increase their competitiveness by integrating their existing knowledge with new and up-to-date knowledge resources, which maybe acquired through various approaches. One of the most popular strategies for knowledge acquisition is through the establishment of a strategic alliance, which can take the form of a joint venture or another contractual agreement. As a result of the rising trend of international outsourcing and the knowledge-based firm, this study is initiated to uncover the factors that facilitate tacit knowledge acquisition and the impacts of that knowledge on the capabilities and opportunities for Malaysian international outsourcing suppliers.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The purpose of this chapter is to provide a review of the relevant literature and to introduce some of the theoretical fundamentals that are utilized in building the conceptual model and developing the hypotheses for this thesis. The thesis integrates several major theories in organizational studies with some of the most important areas in current international business and knowledge management research. This chapter starts with the discussion of three major theories applied in this study: (1) the resource-based view, (2) the knowledge-based view, and (3) the relational capital. Each of these literature domains is included in order to provide a comprehensive review of the extant research that supports the research objectives and research questions described in Chapter One.

2.2 Theoretical Foundation

2.2.1 Resource-based view (RBV)

The resource-based view of the firm (Wernerfelt 1984) emphasizes the ability of a firm to create a competitive advantage through its resources, competencies and capabilities (Spender and Grant 1996), such as its technology, assets, skills, manufacturing processes and knowledge. In his article entitled 'Firm Resources and Sustained Competitive Advantage', Barney (1991) points out that, only resources with certain features are useful for a firm's strategic development and implementation. He further specifies that a

firm can sustain its competitive advantage if it possesses rare, valuable, difficult-to-imitate and non-substitutable resources. These features match the importance of tacit knowledge, which has been argued to be an exclusive resource, critical to firm competitiveness (Grant 1996a; Howells 1996; Morrow Jr et al. 2007), hence explaining the strategic connection between this sticky tacit knowledge and the RBV. This fact is especially true given that Yang and Farn (2009) also assert that tacit knowledge is a precious intangible resource essential to a firm's competitive advantage and performance. Therefore, a firm should fully utilize the tacit knowledge it has and search for more in order to perform and compete efficiently in its current or future markets.

The RBV can also be applied to explain the rationale behind the establishment of an alliance, such as IJV, since firms normally exploit this type of business relationship to gain access to their partners' valuable resources (Das and Bing-Sheng 2000). It provides a framework for analyzing the rising importance of international outsourcing as a mechanism to gain access to external resources. To shed some light on the application of this theory to international outsourcing, Dyer and Singh (1998) offer an explanation of how competitive advantages are achieved in interorganizational contexts. It is claimed that a firm's critical resources may cross firm boundaries and become embedded in interfirm resources and routines. This leads to the fact that a supplier who is involved in international outsourcing can exploit the opportunity to create competitive advantage through problem solving and tacit knowledge sharing routines with its foreign partners.

No doubt international outsourcing initiatives provide opportunities for suppliers to obtain new, dissimilar and complementary resources. For instance, valuable tacit knowledge and skills can be accessed and acquired practically in this buyer-supplier relationship. Through collaborative linkages, suppliers are able to take advantage of the entire learning and interaction processes since the outputs can be internalized to add value. To stay competitive in a rapidly cultivated and advanced international business environment, firms such as suppliers will seek resources and knowledge from partners in interfirm business collaborations (Powell et al. 1996) and utilize them to enhance their organizational capabilities. Clearly, suppliers can gain strategic benefits, especially through obtaining intangible resources that are unavailable internally, while fulfilling outsourcing contracts and working together with their foreign buyers.

2.2.2 Knowledge-based view (KBV)

The knowledge-based view, which deals with knowledge characteristics and knowledge integration, has been applied extensively to the study of organizations (Bonache and Brewster 2001; Huang and Newell 2003; McEvily and Chakravarthy 2002; Wang et al. 2004). The argument of the KBV is that knowledge is an important resource for a firm's strategic growth and competitiveness (Azadegan et al. 2008; Grant 1996b). It also recognizes that a firm's knowledge contributes to its value-adding and strategic directions (Grant 1997). Based on this view, as knowledge especially its tacit part is a critical source of a firm's competitive advantage (Winter 1987), a distinctive ability to acquire, assimilate and apply the knowledge is essential, both in the sense and in improving a firm's efficiency and competitive advantage (Thuc Anh et al. 2006). For

this reason, it is vital for a firm to put extra effort into accumulating its knowledge stock, particularly the tacit elements, in order to increase its overall performance. In the strategic management literature, knowledge is emerging as the most strategically significant resource of any firm. It is argued that learning and the application of knowledge-based resources are at the heart of competitive advantage and firm success (Teece 1998). Since firms can in some way be seen as distributed knowledge systems (Grant 1996a), a firm needs to have the capabilities to integrate different kinds of knowledge in an effective manner so that it can achieve sustainable competitiveness. Through the knowledge integration process, a firm can transform the specialized knowledge base of a number of individuals into applicable knowledge that directly or indirectly relates to its knowledge capability (Huang and Newell 2003).

Knowledge-based resources refer to a firm's intangible know-how and skills. In contrast to property-based resources, knowledge-based resources are not easily imitable. Others cannot easily copy or imitate these resources, because they are vague and ambiguous. Thus, tacit know-how, skills and technical expertise that are not protected by patents, all fall into this category (Hall 1992). The sources of tacit knowledge can be found in the accumulation of organizational know-how that adds force to technology and other knowledge-based assets. As a firm gains experience and tacit knowledge, it gains better insights into how to apply or make use of explicit knowledge (Evangelista and Hau 2009). In effect, tacit knowledge can enhance the understanding of explicit routines and other explicit know-how acquired from the foreign partner (Dhanaraj et al. 2004). From the knowledge-based perspective, Nahapiet and Ghoshal (1998) argue that relational

aspects could facilitate knowledge acquisition and exploitation by satisfying the necessary conditions for the creation of value through the combination and exchange of intellectual resources in the organization.

2.2.3 Relational capital

Relational capital is one of the fundamental dimensions of social capital theory, along with the cognitive and structural dimensions. It is defined in this study as a relationship that is positively developed through social embeddedness between the international outsourcing supplier and its foreign buyer. The central idea of this relational concept in knowledge management is that a close relationship between partnering firms acts as a channel for knowledge exchange and acquisition (Nahapiet and Goshal 1998, Yli-Renko et al 2001). It is also argued that relational capital is essential in the acquisition of tacit knowledge (Collins and Hitt 2006) and know-how that is difficult to codify (Kale et al. 2000). This is mainly associated with the fact that tacit knowledge has personal and intuitive qualities (Nonaka 2007), and is embedded in organizational routines and processes. Thus, the acquisition of this complex knowledge can be enhanced by engaging both partners in socialization and action learning events (Koskinen and Vanharata 2002).

In the context of international outsourcing, while fulfilling their contract obligations, suppliers could exploit this business relationship by learning the foreign buyers' tacit knowledge and valuable competencies. This acquisition can be seen as necessary, especially when the suppliers must obtain the tacit elements of new know-how or

technology from the outsourcing relationship in order to show their commitment to meet or exceed the foreign clients' expectations. There are also situations where the buyer voluntarily helps the supplier by sharing tacit knowledge and specific technical expertise in order to gain benefits such as higher product quality, lower production costs and improved performance. The supplier's learning process and the foreign buyer's willingness to transfer tacit knowledge must definitely be accompanied by the establishment of relational capital built on a foundation of trust and interaction (Collins and Hitt 2006, Dhanaraj et al. 2004). According to Becerra et al. (2008), the acquisition of tacit knowledge is likely to take place in the presence of a close relationship between partners. This then draws attention to the way relational capital enhances the acquisition of tacit knowledge in interfirm relationships. Since tacit knowledge is experience-based and action-oriented (Lam 2000), it can be effectively acquired through social embeddedness and the partners' involvement in various interactive learning activities, such as knowledge sharing and joint problem-solving (Uzzi 1997).

2.3 International Outsourcing

In reality, the current use of the term international outsourcing always tends to create confusion as authors use various terms for it, such as offshore outsourcing, offshoring or global outsourcing, to refer in general to subcontracting projects outside the home country. Mol et al. (2005) explain that international outsourcing represents that part of outsourcing sourced from outside the home country. Other definitions of international outsourcing and related terms that are used interchangeably with it are shown in Table 2.1. However, for the purpose of this study, international outsourcing is taken to have a

fairly broad definition as an international business practice in which a firm in one country buys components or finished products from a foreign supplier, or from a firm that assembles them in another country. The buying company in this study is an international company, referred to as the foreign buyer that runs its business operations internationally. Meanwhile, the supplier is a local company from Malaysia that receives outsourcing contracts from a foreign buyer.

Table 2.1 Definitions of Various International Outsourcing Terms

Authors	Terms	Definitions and Descriptions
Mol et al (2005)	International outsourcing	Sourcing intermediate products from supplier outside focal country.
	Regional outsourcing	Involves outsourcing outside the focal country, but within a formal free trade region.
	Global outsourcing	Involves outsourcing outside the buyer's trade region.
	Combination	Regional and global outsourcing together form international outsourcing.
Monczka and Trent (1991)	International sourcing	Firms buy from foreign suppliers.
	Global sourcing	Integration and coordination of procurement requirement across worldwide business units, looking at common items, processes, technologies and suppliers.
Murray et al. (1995)	Global outsourcing	Involves setting up production operations in different countries to serve various markets, or buying and assembling components or finished products worldwide

(Maskell et al. 2007)	Offshoring outsourcing	A firm's delegation of in-house value chain activities to independent suppliers located in low-cost environments outside its home country.
Sen and Islam (2005)	Offshore outsourcing	Firms outsource some of their functions to low-cost locations overseas on the basis of geographical diversification by contracting the job to a third party
	Offshoring	Firms outsource some of their functions to low-cost locations overseas on the basis of geographical diversification by setting up a subsidiary at an overseas location to undertake the functions.

International outsourcing has been mentioned as an important strategy for international companies wishing to obtain and increase a competitive advantage (Monczka and Trent 1991). The trend has increasingly developed and emerged (Mol et al. 2005) in various industries, including sportswear, footwear, cellular phones, automobiles, clothing, computers and furniture, to name only a few. The multinational firms Nike, IKEA, Kodak, Volvo and Nokia are just some examples of the international players that are actively involved in international outsourcing. The reason behind such activity is that, in order to compete globally, firms have to put more focus on efficiency and cost savings. Therefore, as firms seek to enhance their competitive positions in an increasingly global marketplace, they are realizing that they can cut costs, maintain quality and increase efficiency by relying more on outside service providers or suppliers for activities viewed as supplementary to their core business (Ryan 1999). As such, foreign buyers will most likely choose external suppliers that can meet their cost, profit and efficiency requirements.

In the international outsourcing context, the approach is to strategically use international suppliers to perform activities for the international buyers that have traditionally been handled by an in-house workforce. In practice, companies will normally outsource non-core functions (Maskell et al. 2007; Trent and Monczka 1999) to specialized and efficient external suppliers. By doing so, the buying companies are able to focus on their core competencies and what they do best (Schniederjans and Zuckweiler 2004a). Therefore, more effort can be put into product development, design and marketing, in order to improve product value (Arrunada and Vazquez 2006). As a result of reducing the production costs, increasing efficiency and upgrading product quality through international outsourcing activities (Bahrami 2009), the companies are able to become more competitive in international markets (Gregorio et al. 2009). It is likely that cost advantage (Choi 2007) and experience (Arrunada and Vazquez 2006) play a vital role in the foreign buyer's choice of outsourcing supplier, it is crucial that outsourcing suppliers can provide excellent references, evidence of sound financials and a proven track record of experience in outsourcing projects especially at the international level (Webb and Laborde 2005). On top of this, the supplier's involvement, technological updates and innovation capabilities are also significant when it comes to the supplier selection process. These factors are deemed to be essential elements in international outsourcing collaborations nowadays due to the increasing intensity of global competitive rivalry.

From the suppliers' perspective, international outsourcing provides a means for them to compete with other suppliers, leading to higher levels of efficiency (Mol et al. 2005). Additionally, through such business relationships, local suppliers have the opportunity

to gain access to the new technology and best practices of their foreign buyers (Moreira 2009), particularly valuable in the case of buyers with superior capabilities. The significance of a supplier tapping new resources and acquiring critical knowledge is apparent, given the pressure on them to add value to the buyer-supplier relationship, as well as to meet or exceed the foreign buyer's expectations. Working jointly with a foreign buyer allows a supplier to upgrade its capabilities and competitive advantage as the buyer will often provide assistance in various forms ranging from setting up quality standard for product and delivery, to providing technical support and training, to assisting with innovation and finally to helping the supplier detect future business opportunities through the buyer's networks. This can only be achieved when the supplier is open to such opportunities to acquire tacit knowledge since absorbing newly transferred knowledge and skills evidently requires several learning processes. The impact of accumulating the knowledge, expertise and experience gained from the relationship with a foreign buyer will subsequently lead to the enhancement of the supplier's efficiency and capabilities.

In the case of Malaysia, the country is shifting away from being an exporter of commodities to an economy that relies heavily on its manufacturing industry. Previously, this industry depended solely on low-skilled and labor-intensive activities. However, in response to the government's call to action, the county is now moving speedily toward becoming a high value-added, high technology and more knowledge-based economy (Mahmood 2000). In fact, some Malaysian manufacturing suppliers have adjusted and progressed quite well by staying in line with the country's desire to

increase the competitiveness of its manufacturing industry. This can be attributed in part to the exploitation of the knowledge and technology acquired through business collaborations with foreign clients. Globetronics Sdn. Bhd. is an example of a Malaysian manufacturing supplier that uses the opportunity of accessing and acquiring new knowledge and expertise from its international business alliance partners to enhance its competencies in technology and marketing (Tidd and Brocklehurst 1999), hence capturing a larger fraction of the global market. Obviously, international business partnerships can serve as a platform for Malaysian suppliers to update their organizational capabilities as they can learn from their partners and acquire skills and technology from them that are unavailable internally or locally. Thus, as well as IJVs, the government is strongly encouraging local manufacturing suppliers to use international outsourcing arrangements as a strategic channel to obtain know-how and technological updates from their partners (Tidd and Brocklehurst 1999). It is worth mentioning that tacit knowledge and practical experience are grasped more easily through these types of collaboration, where interaction, problem-solving and feedback can greatly facilitate the acquisition of sticky and unwritten aspects of the new external knowledge.

2.4 The Concept of Knowledge

Since the main are of interest in this study is tacit knowledge acquisition, it is helpful to delve into the general meaning of knowledge. Knowledge is defined by different scholars in numerous ways and using many different approaches. Nonaka (1994) classically defines knowledge as ‘justified true beliefs’, while Grayson and O'Dell

(1998) describe knowledge in terms of valuable information in action. On the other hand, Davenport and Prusak (1998) view knowledge from a multifaceted, but deeper, perspective. They view knowledge as experiences, values, contextual information and expert insights that are embedded, not only in written forms, but also in informal forms such as organizational routines, practices and cultures. In some cases, knowledge has been confused with information. In actual fact, each represents a different concept and interpretation. Information, as opposed to knowledge, simply means a message or document (Prusak 2006), and is built up of facts that have little significance in terms of value (Inkpen 2008). The differences between knowledge and information are illuminated further in Table 2.2.

Table 2.2 The Differences Between Knowledge and Information

	Knowledge	**Information**
Description	Assimilation and connection of information through experience; constructed from cognitive perception.	Knowing what something means; messages, documents, facts and speech.
Specification	Context-specific; cumulated and embedded in an organization.	One-dimensional; bounded by its form.
Value	Source of competitive advantage.	Worth little for an organization.

Sources: Adapted from Prusak (2006) and Inkpen (2008).

Knowledge can be created in an organization and dispersed throughout the whole organization by individual employees (Inkpen and Dinur 1998). For the organization to learn, the employees must learn from various sources, such as from business partners, and transfer the acquired external knowledge to other employees in the organization. This process has been termed a spiral knowledge creation (Nonaka 1994), indicating that knowledge will gradually expand, starting at the individual level, then progressing to the group level and finally shifting to the organizational level. Once the knowledge is stored internally, it will accumulate over time, given the fact that knowledge is experiential by nature (Kogut and Zander 1993). Continuous learning, interaction and information sharing eventually provide the experience necessary for knowledge deployment.

Kogut and Zander (1993) present three different attributes of knowledge: codifiability, teachability, and complexity. Codifiability measures the extent to which the knowledge can be articulated in documents, while teachability measures the ease with which knowledge can be taught to new workers. Finally, complexity indicates the number of critical and interacting elements in the transferred knowledge. Knowledge that is hard to codify, hard to teach and complex is actually a very valuable resource for an organization precisely because of the difficulty in transferring or learning it, which means it is not easy for competitors to imitate. In this case, the knowledge can safely be kept in-house and continues to provide the firm with a competitive advantage. Besides serving as a strategic resource, knowledge is also crucial for a firm’s strategic renewal (Inkpen and Dinur 1998).

A firm will seek new knowledge that it lacks but which is important for its strategic objectives (Inkpen 1998; Teece 1998). The tendency to seek new knowledge relies on a firm's absorptive capacity (Cohen and Levinthal 1990), which is the ability to monitor, search for and apply new knowledge to an existing knowledge base (Hamel 1991). Many researchers have argued that knowledge and the capability to create and utilize it are the most important sources of a firm's sustainable competitive advantage (Nonaka 1991; Nonaka and Takeuchi 1995; Teece et al. 1997; Winter 1987). Thus, constant knowledge creation and application (Nonaka 1991) are required for a firm to maintain a competitive and profitable edge in a world where markets, customer tastes and preferences, products, technologies and competitors change rapidly. However, knowledge will only be a strategic asset once it has been transformed into a firm competency (Teece 1998), which will then need to be utilized for commercial ends and competitive instruments. Knowledge is in fact only considered valuable if it can be applied, and the more it is used, the higher will be its value (Inkpen 2008).

2.4.1 Explicit and tacit knowledge

In knowledge management articles (Inkpen and Pien 2006; Nonaka et al. 2000a; Polanyi 1966), most scholars divide knowledge into two broad categories: (1) explicit knowledge and (2) tacit knowledge. Explicit knowledge is knowledge that can be codified, articulated and easily communicated, and is therefore, easily transferred between individuals and organizations (Alonderiene et al. 2006). Specifically, it is available in formulae, textbooks or technical documents (Lee and Yang 2000). From a different perspective, this type of knowledge is inclusive of 'facts, axiomatic propositions and

symbols' (Kogut and Zander 1992, p.386). It can also be found in a company's policies, systems, guidelines, and procedures. Since this type of knowledge is written and kept in a formal way, it is easily shared (Haldin-Herrgard 2000; Nonaka 2007) and copied (Easterby-Smith et al. 2008) as needed.

In contrast, tacit knowledge is difficult to learn or transfer. This type of knowledge was first highlighted by Polanyi (1958) and brought into economic discussions by Teece (1981) and Nelson and Winter (1982). It can be generally described as sticky, complex and difficult to codify (Kogut and Zander 1992; Nelson and Winter 1982; Szulanski 1996). Koskinen and Vanharanta (2002) simplify the idea of tacit knowledge as being practical know-how. However, it is Polanyi (1966), who more delicately defines tacit knowledge as knowledge that is non-verbalizable, intuitive and unarticulated. He also argues that a large part of human knowledge is tacit. As the transferors or acquirers of knowledge, employees themselves are among the most important elements in determining the effectiveness of knowledge transfer or acquisition. The process demands strong relationships between partners, as close interaction and trust are highly necessary for such disclosure. In addition, tacit knowledge is also recognized by Nonaka (1994) as to be difficult to formalize and communicate as it is highly context-specific and has a personal quality. With all these elements, tacit knowledge is more likely to result in advantages that are sustainable. In fact, the more tacit an activity or resource, the more difficult and costly it is for others to imitate.

Tacit knowledge involves cognitive elements such as mental models, paradigms, beliefs and viewpoints that help individuals perceive and define what they understand (Nonaka 1994). It also includes technical factors such as know-how and skills. Lubit (2001) identifies four categories of tacit knowledge: (1) skills or know-how, (2) mental modes, (3) ways of approaching problems, an (4) organizational routines. For workers or managers to acquire skills, they need to practise them repeatedly, receive feedback and get the feel of them. Once the managers are comfortable with the new skills, the tacit part will be embedded into their mental mode and daily routines. Mental modes are constructed by individual to help them to make sense of what is happening in the world, how the world is constructed, what factors are important and how these factors are related to each other. They help people to make sense of huge amounts of data, use only the relevant data, form understanding of problems and finally find solutions.

On the other hand, ways of approaching problems derive from habits in terms of thinking about and processing information. Approaches used to understand problems will be developed into a decision-making process that is used to solve problems. Finally, looking at Lubit's fourth category of tacit knowledge, much of an organization's tacit knowledge is stored in routines, which are regular and predictable behavior patterns. Routines can become standard operating procedures and roles. They can be further developed, refined or enforced by the organization. Once this has been done, the knowledge will be embedded in the minds of the individuals in an organization. When the individuals leave, the routines will remain in the organization, as well as in the minds of the individuals.

In comparison to explicit knowledge, tacit knowledge is more difficult to acquire from a partner. Kogut and Zander (1992) argue that if tacit knowledge is difficult to codify and learn, then the transfer between firms will be slow, costly and uncertain. As a result, the process of applying and exploiting it will also be challenging. Nevertheless, as Zahra et al. (2000) assert, tacit knowledge is more valuable to firms that can develop the capacity to integrate this resource into their business operations. Furthermore, if a firm's capabilities are based on tacit knowledge, which is complicated for competitors to replicate, then those capabilities are ideal strategic sources of superior performance (Barney 1991).

2.5 The Acquisition of Tacit Knowledge

Although explicit knowledge is easy to acquire and can be exploited quickly, tacit knowledge is argued to be more valuable (Polanyi 1966). Furthermore, it is recognized that the acquisition and application of tacit knowledge is essential in strengthening a firm's competitive advantage (Inkpen 1998; Nonaka et al. 2000a) and enhancing its capabilities (Makhija and Ganesh 1997). In fact, the acquisition of tacit knowledge promises great returns for a firm if it realizes that utilizing this type of sticky knowledge can give it a competitive edge. Zahra et al. (2000) confirm this argument by indicating that tacit knowledge is more valuable to firms that can develop the capability to transfer, acquire and integrate these resources. Since it is difficult to identify and interpret a firm's tacit knowledge, it has more potential than explicit knowledge in terms of giving the firm a competitive advantage (Collins and Hitt 2006).

Knowledge acquisition involves complicated processes. It constitutes a difficult and subtle process, often coupled with significant dissatisfaction between partners (Martin and Salomon 2003). De Bruijn and Jia (1993) point out that knowledge acquisition is fairly complex because it is not only a matter of the knowledge itself, the transfer is also influenced by differences in culture and social systems. In addition to this, knowledge acquirers (local suppliers) from developing countries usually have less experience in learning new information (Hitt et al. 2000). Thus, knowledge transferors (foreign .section.Section_8ab58e8f-7f000010-72f772f7-dbf00272</url></related-

the developing country's acquirers by offering active managerial involvement (Lyles and Salk 1996), human resource transfer (Inkpen and Dinur 1998), training (Lane et al. 2001) and in-depth transparency (Hamel 1991).

When firms develop capabilities through knowledge acquisition, they create strategic knowledge-based assets that cannot be imitated quickly. The learning and improvement not only involves organizational processes but also cover products, technology, systems and other aspects of the business (Soosay and Hyland 2008). The organizational structure and culture need to be established so as to facilitate learning and absorptive capacity among employees. Successful knowledge acquisition is also vital for firms in terms of improving product quality, increasing production speed and carrying out new product development. This further explains why knowledge is credited as being one of the most critical resources that can help a firm to gain a competitive advantage when competing internationally (Grant 1996a). In addition, it has been argued that a firm can potentially gain a competitive advantage if it has the ability to effectively embrace

knowledge transfer or acquisition and then exploit the knowledge it has obtained in strategic ways (Grant 1996a; Kogut and Zander 1993). This shows that, a firm can no longer depend only on its market or product-based advantages to compete with its rivals, but should also strategically rely on its ability to absorb and assimilate new knowledge, either from its business partners or its own internal efforts.

A manager in a local supplier company will acquire tacit knowledge by experiencing the behaviors and consequences of those behaviors first hand, preferably while working with experts. In this case, the experts are the foreign buyer's managers, who have been assigned to work with the local managers to solve operational problems in the international outsourcing relationship. The experience of observing experts helps the local managers, consciously and unconsciously, to absorb what to do, how things are related and how to address and solve problems. They may acquire tacit knowledge through direct observation and interaction, as apprentices normally do. They will learn from their trainers and use the same methods when they face similar situations. Direct observation can be combined with explanation and two-way interaction in order to provide the managers with additional information about the best way to carry out a task or solve a technical problem. When managers try out various solutions on their own and then compare their performance to that of the expert or trainer, it means that they are applying the tacit knowledge learnt from the foreign managers. Once that knowledge has been obtained from the foreign buyer, the local firm should be ready to assimilate and apply the new knowledge internally. This is normally done by combining the newly acquired knowledge with the firm's existing knowledge.

Lane et al. (2001) and von Hippel (1994) indicate that training is an effective learning mechanism because it provides a platform for acquiring knowledge in large volumes and connecting it to existing knowledge. When the connection has been established, the firm is ready to convert the existing and new knowledge into a new product or innovation. According to Collins and Hitt (2006), in order to recognize the value of the knowledge that has been acquired, a firm should diffuse it across the organization and apply it further to a commercial end. This explains that after knowledge acquisition, the firm should exploit the knowledge in an efficient and correct way. For example, in a joint venture between Bulova and Japan's Citizen Watch, Bulova transferred to Citizen its tuning fork technology, developed for watches, believing that the technology was not particularly important for its Japanese partner. However, it turned out that Citizen took advantage of this golden opportunity, applying the skills and technology it had gained to its other electronic products (Lei and Slocum Jr 1992).

Tacit knowledge acquisition also occurs when local managers collaborate with the experts to solve problems, with the experts giving hints and ideas as to how the managers might improve their performance. Normally, tacit knowledge is shared through a combination of these methods. However, the key contributing factor in acquiring tacit knowledge is social interaction. According to Nonaka (1994), socialization allows tacit information to move from one individual to another. Through socialization, ideas and information are transferred from individuals to groups to the organization, and finally outside of the organization. Yin and Bao (2006) argue that all forms of knowledge have tacit elements. This includes knowledge relating to

management, marketing, manufacturing processes and product development. However, Shenkar and Li (2001) and Lane et al. (Lane et al. 2001) claim that management and marketing knowledge are more tacit than product development, production and technology knowledge. Given the importance of tacit knowledge, thus, further exploration is warranted of the factors that affect the acquisition of tacit knowledge and its impact on a firm's capability enhancement.

2.5.1 Previous empirical studies on tacit knowledge acquisition in the international business context

Although strategic alliances are acknowledged to be a platform for interfirm learning (Grant 1996a; Hamel 1991), the extant literature on tacit knowledge acquisition has not dealt sufficiently with the buyer-supplier perspective. Most of the researches about learning between partners from different countries have centered on the acquisition or transfer of general knowledge (Lyes and Salk 1996, Tsang 2002, Tsang et al. 2004, Si and Bruton 2005, Wang et. al 2004). None of the research works has explored the acquisition of tacit knowledge in international buyer-supplier relationships. A key reason behind this omission is that the interorganizational learning of tacit knowledge is less complicated in equity-based international strategic alliances than it is in non-equity forms of foreign involvement, such as international outsourcing. In fact, only a few studies have associated tacit knowledge acquisition with international business. Interestingly, the majority of these empirical analyses focus on IJVs, and none of them deal with the buyer-supplier relationship or look at the issue from the supplier's point of view. Indeed, there has been no statistical investigation that thoroughly explores whether

or how Malaysian suppliers obtain new knowledge from international outsourcing, or whether the newly acquired knowledge actually improves their capabilities. Due to these gaps, there is an urgent need for the topic of tacit knowledge acquisition in international outsourcings relationships to be investigated and empirically tested. Therefore, the current study attempts to focus on how Malaysian suppliers acquire tacit knowledge when working with their foreign buyers and how they then enhance their capabilities through this type of business relationship. This is accompanied by a review of the literature in several knowledge management and interorganizational learning, which integrate the concept of tacit knowledge acquisition and buyer-supplier relationships.

Most of the prior empirical work has focused on exploring the acquisition of tacit knowledge from the IJV standpoint. There are two possible reasons for this inclination: (1) the strategic importance of IJVs as a means to acquire knowledge from partners (Lyles and Salk 1996; Tsang et al. 2004), and (2) the fact that knowledge acquisition tends to be greater in equity-based than in nonequity-based partnerships. Since there is no previous empirical research on tacit knowledge acquisition in international buyer-supplier relationships, the comparison and rationalization for this particular study mainly draws on studies of interorganizational learning in IJVs. These works highlight tacit knowledge acquisition and its connection from diverse perspectives, including new product development (Subramaniam and Venkatraman 2001), relational embeddedness (Dhanaraj et al. 2004; Li et al. 2010), absorptive capacity (Thuc Anh et al. 2006) and its implications for firm performance (Yin and Bao 2006). Table 2.3 summarizes a number of previous related studies, specifically in international business context.

Table 2.3 Related Empirical Studies on the Acquisition or Transfer of Tacit Knowledge in International Business Perspective

Author(s)/Topic	Type of business relationships/ Country	Sample/Industry	Data Analysis	Results
(Subramaniam and Venkatraman 2001) The impact of the international transfer and deployment of tacit knowledge on a firm's capabilities for developing new transnational products.	~ MNCs & their foreign subsidiaries ~ U.S.	~ 90 transnational product introductions (from 45 MNCs) ~ 3 manufacturing industries	Regression	o The ability to transfer and deploy tacit knowledge of overseas market is significantly affecting the firms' transnational product development capabilities. o Firms that use of cross-national teams, teams with members who have prior overseas experience or team that communicate frequently with overseas managers to acquire tacit knowledge would likely have better capabilities to develop transnational products.
(Dhanaraj et al. 2004) The role of relational embeddedness on the transfer of tacit and explicit knowledge in IJVs	~ IJV ~ Hungary	~ 140 small and medium-sized IJVs (young & mature) ~ 7 manufacturing industries	Structural equation model (SEM)	o Relational embeddedness has more influence on tacit knowledge than explicit knowledge. o Elements of relational embeddedness (trust, strong-ties & shared system) all are affecting the transfer of explicit knowledge o Tacit knowledge transfer is negatively significant, while explicit knowledge indicates positive and significant relationship with firm performance.
(Yin and Bao 2006) The implications supplier-side individual level and recipient-side factors on tacit knowledge acquisition	~ IJV ~ China	~ 128 IJVs ~ High and low knowledge intensive industries	Regression	o Recipient's collaborativeness, readiness and comprehensive methods (recipient-side factors) all are important in IJVs' acquisition of tacit knowledge. o In term of supplier-side individual level, only individual embeddedness is significant, while individual motivation appears not significant to tacit knowledge acquisition.

Table 2.3 (Continued) Related Empirical Studies on the Acquisition or Transfer of Tacit Knowledge in International Business

Author(s)/Topic	Type of business relationships/ Country	Sample/Industry	Data Analysis	Results
(Thuc Anh et al. 2006) Absorptive capacity and knowledge acquisition from foreign parents	~ IJV ~ Vietnam	~ 173 IJVs ~ N/A	~ Correlation ~ Regression	o Out of six learning elements, investment in training, ability to learn and joint participation have significant relationships with tacit knowledge acquisition but insignificant with explicit knowledge acquisition. o Cultural distance has no effect on general knowledge acquisition. o The tacit knowledge acquired has an influence on IJV performance, but not explicit knowledge.
(Hau and Evangelista 2007) Acquiring tacit and explicit marketing knowledge	~ IJV ~ Vietnam	~ 219 IJVs ~ N/A	Regression	o Learning intent and learning capability (positive), as well as knowledge protectiveness has a significant impact on the acquisition of both knowledge. o Partner assistance is significant only on explicit marketing knowledge. o Cultural distance shows negative impact only on tacit knowledge.
(Evangelista and Hau 2009) Organizational context and the acquisition of tacit and explicit marketing knowledge	~ IJV ~ Vietnam	~ 219 IJVs ~ N/A	Structural equation model (SEM)	o Teamwork shows significant and positive relationship with both tacit and explicit marketing knowledge, while management commitment has no impact on the acquisition of tacit marketing knowledge. o Relationship strength and cultural distance factors both have significant effects on tacit marketing knowledge, but insignificant on explicit marketing knowledge.
(Li et al. 2010) Local knowledge acquisition by international subsidiaries	~ FDI ~ China	~ 168 foreign subsidiaries ~ Manufacturing industry	~ Regression ~ Structural equation model	o Contracts links positively with explicit knowledge acquisition, but not related to tacit knowledge acquisition. o Brokered access influences only the acquisition of explicit, but not tacit knowledge. o Shared goals affect both tacit and knowledge acquisition. o Trust is only related to the acquisition of tacit knowledge.

2.6 Elements Influencing Tacit Knowledge Acquisition

2.6.1 Supplier's absorptive capacity

Acquiring knowledge from an alliance partner can be challenging, especially if the partner comes from another country with cultural and organizational differences. However, the need to stay ahead of competitors makes it vital for a firm to continuously improve its product, and this can be done through knowledge acquisition. Besides a partner's openness and willingness to share valuable knowledge, a firm's ability to identify and utilize knowledge also affects its efficiency in acquiring new knowledge from its collaborative partner. In short, it involves the firm's and its employees' absorptive capacity, a term pioneered by Cohen and Levinthal (1990). According to these authors, absorptive capacity can be thought of as the firm's ability to recognize the value of new and external knowledge, and assimilate and commercialize it for end products. This definition has been cited by many organizational learning researchers, including Lyles and Salk (1996), Lane and Lubatkin (1998), Lane et al. (2001) and Thuc Anh (2006). In addition to three absorptive capacity dimensions featured by Cohen and Levinthal (1990), another dimension has been added by Zahra and George (2002). They introduce transformational capacity, which is important for the integration of existing knowledge with the new external knowledge acquired from the foreign buyer.

In sum, a firm is capable of exploiting the new external knowledge for the purpose of gaining a competitive advantage if it has the capacity to absorb the knowledge in the first place. Nevertheless, a firm will struggle to recognize and value important external knowledge if it lacks absorptive capacity. In this case, even if the firm has access to new

knowledge, it may not have the ability to realize this and absorb the knowledge (Tsai 2001). Even within firms, a lack of absorptive capacity is found to be a major impediment to internal knowledge transfer (Szulanski 1996). Without absorptive capacity, knowledge is difficult to be acquired or transferred within a firm (Tsai 2001).

In the case of outsourcing suppliers, in order to recognize, assimilate and exploit the new and critical external tacit knowledge, such firms should have the capacity to absorb what they hear, see and learn while working with foreign buyers. Undoubtedly, the supplier's absorptive capacity to acquire tacit knowledge in an international outsourcing relationship will be more effective if it already possesses a related knowledge base and is involved in a similar business to their foreign buyer. Prior related knowledge helps a supplier to detect new and valuable accessible tacit knowledge while they are performing the outsource tasks for foreign buyer. In addition, it is easier to identify and understand a buyer's tacit knowledge if the supplier and its foreign buyer is engaged in a similar business. As tacit knowledge is best acquired through practical and social activities (Tsoukas 2003), there is also a need for appropriate learning methods that incorporate interactive learning and the active involvement of both the international buyers and the suppliers. These methods actually provide a window of opportunity for learning-by-doing and observation, which are essential for the acquisition of tacit knowledge from a partner (Collins and Hitt 2006). Given the above arguments, the three elements of absorptive capacity – prior related knowledge, business relatedness and interactive involvement – are expected to influence the Malaysian suppliers' tacit knowledge acquisition from their foreign buyers.

2.6.1.1 Prior related knowledge

In several knowledge management articles, prior related knowledge is variously referred to as supplier's prior knowledge (Altinay and Wang 2006; Cohen and Levinthal 1990; Lane and Lubatkin 1998), employees' ability to learn (Thuc Anh et al. 2006) and employees' ability (Liao et al. 2007; Minbaeva et al. 2003). From the viewpoint of Cohen and Levinthal (1990), prior related knowledge includes various related knowledge domains, basic skills and problem-solving methods, prior learning experience and learning skills, and a shared language. They even claim that prior related knowledge is important for a partner to fully acknowledge the value of newly acquired knowledge. In line with this assertion, Powell et al. (1996, p.20) argue that 'knowledge facilitates the use of other knowledge. What can be learned is crucially affected by what is already known'. This statement implies that new knowledge can easily be identified and absorbed if a learner is equipped with a knowledge base, related skills and the experience necessary for an effective knowledge acquisition. Therefore, prior knowledge is critical to a firm as it helps in recognizing and assimilating the valuable new knowledge and exploiting it for the firm's commercial advantage.

Inkpen and Pien (2006) recognize other researchers' view that prior knowledge helps to smooth the progress of learning new knowledge. They explain that if the one partner already has existing knowledge that is related to the new knowledge that it hopes to acquire from the other partner, then the process of knowledge acquisition will be easier. When a firm's employees are familiar with some of the processes, languages and terms used in talking about and dealing with a new area of knowledge transferred by the

partner, their ability to absorb and apply this newly acquired knowledge is more efficient. They will have difficulty, meanwhile, in acquiring unrelated knowledge because of their limited understanding over of it (Inkpen and Pien 2006).

Different suppliers have different abilities when it comes to exploring, acquiring and utilizing new external knowledge. It depends on their absorptive capacity, which is an important factor for a supplier to acquire, absorb, circulate and utilize the new information from external sources (Cohen and Levinthal 1990). A supplier's absorptive capacity will not exist on its own, but is captured and developed through the employees' capabilities to learn (Cohen and Levinthal 1990; Zahra and George 2002). Following this argument, Minbaeva et al. (2003) contend that employees' ability is one of the main contributors to the effectiveness of a firm's absorptive capacity.

In a study of Samsung's technological learning, Kim (1997) emphasizes that absorptive capacity consists of a prior knowledge base and intensity of effort. He defines the prior knowledge base an individuals' existing knowledge that is available to a firm. Following this line, Liao et al. (2007) rephrase prior knowledge as employees' ability in their empirical study on knowledge sharing and absorptive capacity in Taiwan's knowledge intensive industry. As expected, they found that learning ability has a significantly positive effect on knowledge sharing. In a another study that is conducted in Vietnam, Thuc Anh et al. (2006) report that the ability to learn positively influence IJVs' acquisition of tacit knowledge from foreign parents. On the other hand, Minbaeva et al. (2003) discover a conflicting result that employees' ability does not significantly affect

the process of knowledge transfer between foreign subsidiaries and multinational companies (MNCs) operating in the USA, Russia and Finland. However, in that study, the relationship between the two variables did turn out to be positive and significant when prior knowledge was considered together with employees' motivation. According to Kim (1997), prior knowledge mainly consists of a stock of tacit knowledge that resides in employees' memories. Therefore, it is expected that new tacit knowledge can easily be identified and absorbed if a supplier, through its employees, possesses sufficient prior related knowledge that is largely based on tacit elements. An employee's work experience, skills and know-how could be related to their ability to detect the new external tacit knowledge required for them to increase their work performance and the firm's capabilities. As pointed out by Cohen and Levinthal (1990), accumulated prior knowledge influences an employee's ability to store newly acquired knowledge and its ability to retrieve and apply it at the organizational level. Having the potential to affect suppliers' tacit knowledge acquisition from their foreign clients, the following hypothesis concerning prior related knowledge and tacit knowledge acquisition is proposed:

H_1: The Malaysian suppliers' prior related knowledge is expected to be pivotal in the acquisition of tacit knowledge as it helps them to understand better the foreign buyers' requirements.

2.6.1.2 Business relatedness

Some researchers acknowledge that business relatedness may influence a firm's effectiveness in acquiring new knowledge from a business partner (Lane and Lubatkin 1998; Merchant and Schendel 2000), thus affecting the alliance performance (Lyles 1991). The reason for this is that business relatedness between supplier and foreign buyer facilitates the supplier's absorptive capacity (Mowery et al. 1996). It is also claimed that the relatedness of two partners provides them with prior knowledge and information about the industry, products and customers that are relevant to both of them (Thuc Anh et al. 2006). Lane et al. (2001), who study absorptive capacity in IJVs, suggest and finally prove that relatedness is one of the more important factor contributing to understanding external new knowledge (Cohen and Levinthal 1990). They further argue that relatedness indicates the similarity of business objectives and strategic sources between a foreign parent and its IJV. Indeed, for a supplier to easily grasp and absorb potential knowledge from its buyer, it needs to share some similar aspects with the buyer, such as a common industry, skills or experience. Apart from acquiring potential knowledge, partners can also take advantage of their similarities to build trust and so enhance knowledge acquisition further (Saxton 1997).

In their research into R&D in joint ventures, Richards and De Carolis (2003, p.8) refer to business relatedness as 'the extent to which the parent companies in a joint venture are in similar businesses'. Applying this definition to the international outsourcing context, this study defines business relatedness as the extent to which the suppliers and their foreign buyers are engaged in similar businesses. If a supplier and its foreign buyer work

in similar businesses, they will be familiar with each other's business environments. Cohen and Levinthal (1990) argue that prior experience and knowledge familiarity will increase a firm's level of knowledge acquisition from its partner. As a result, knowledge misappropriation can be reduced (Richards and De Carolis 2003), because in this case, a supplier and its foreign partner will readily understand each other due to commonalities and familiarity. In fact, similarities between partners smooth the process of knowledge transfer, and increase mutual understanding and collaboration in their business relationship (Lui et al. 2006).

In addition to similarity, business relatedness can also be viewed from the perspective of complementarity, which can be described as the different capabilities partners bring to their business relationship (Kale et al, 2000). Working together with foreign buyers enhances the suppliers' ability and opportunity to acquire strategic complementary resources that it may be lacking, including new tacit knowledge. Inkpen and Pien (2006) note that the differences in partners' skills and knowledge facilitate learning, while Knudsen (2007) claim that complementary knowledge brings higher learning potential. The benefit of learning is one of the motivations behind the formation of alliances (Inkpen, 2000), as firm not only works together with its partner, but at the same time aims to obtain different but complementary technologies and assets that are accessible in the business relationship (Teece 1998). As contended by Easterby-Smith (1997), collaborative partners should not be too similar and should bring complementary competencies into the relationship. In the case of this study, dissimilarities in capabilities and technological levels between partners will expose the suppliers to different

marketing, management or manufacturing techniques. Therefore, the suppliers will be more likely to be tempted to learn from the buyer-supplier relationship, such as new ways of managing their business operations and producing better quality products. In international outsourcing, suppliers may also get the opportunity in gaining access to their foreign buyers' resources, expertise and ideas, which may be new to the suppliers yet relevant and valuable for their future development. These external inputs can be combined with the suppliers' existing knowledge and competency to improve their manufacturing efficiency and increase their overall performance. In line with this assertion, Richards and De Carolis (2003) and Teece (1998) reiterate the importance of complementarity, advocating that the acquisition of complementary assets from external sources – especially difficult-to-imitate resources, such as tacit knowledge – can be an instrument of competitive advantage. A foreign buyer with superior capabilities and advanced technology can be of great help to a supplier who is in critical need of new and improved abilities. Since the supplier and its foreign buyer work interdependently, the supplier should grab the opportunity offered by such synergy to learn the tacit elements of new complementary knowledge and skills through the business partnership.

Several empirical works have set out to investigate the implications of business relatedness on knowledge acquisition in Vietnamese IJVs. In their study of the impact of trust, control and absorptive capacity on knowledge acquisition from foreign parents, Lyle et al. (2000) find support for the idea that parent-to-IJV relatedness is positively associated with knowledge acquisition. Similarly, the quantitative findings of a study by Thuch Anh et al. (2006) show that business relatedness between an IJV and its foreign

parent significantly affects both explicit and tacit knowledge acquisition. They even argue that this predictor increases an IJV's absorptive capacity, given that business relatedness provides prior knowledge concerning important information, such as industry, products, customers and technology (Lyles et al. 2000). Based on the transaction cost literature, business relatedness facilitates production and transaction-oriented gains between partners (Merchant and Schendel 2000). Moreover, business relatedness not only benefits the operational and financial aspects of the partners' performance, but at the same time, minimizes information asymmetry and enhances communication (Merchant and Schendel 2000), both of which are listed among the most pivotal criteria for the success of knowledge acquisition. In line with this contention, there is a possibility that business relatedness enhances and intensifies the opportunities for learning or transferring tacit knowledge between two firms, such as a buyer and a supplier. This argument provides the following hypothesis:

H_2: If the businesses of the Malaysian suppliers and their foreign buyers are related, it will have a positive effect when acquiring the tacit elements of the buyers' requirements.

2.6.1.3 Interactive involvement

In this study, interactive involvement is defined as the knowledge acquisition methods employed by or accessible to a supplier in its effort to gain tacit knowledge from a foreign buyer. To identify and absorb such complicated and abstract knowledge, a supplier needs an appropriate learning approach to facilitate the knowledge acquisition process. In a study on Japanese-North American joint ventures, Inkpen and Dinur (1998)

discovered that the alliance knowledge transfer was carried out through structured meetings between the joint ventures and managers from the parent company. In addition, regular visits were made by the parents and engineers from both sides, who were stationed at each other's facilities. When both partners work and interact with each other, access to new valuable knowledge becomes openly available, as face-to-face interaction turns out to be one of the facilitators of tacit knowledge acquisition (Eng, 2005). In fact, Lam (2000) emphasizes that direct involvement and close cooperation between alliance partners enables firms to comprehend and acquire each other's tacit knowledge.

In a study concerning knowledge transfer in multinational enterprises' vertical linkages, Giroud (2007) makes interesting findings through a comparison of the knowledge transfer activities in Malaysia in 1996 and 2002. In general, 19 learning methods were available to the Malaysian local suppliers. These were classified into two broad categories: training and production. The training activities included professional and operational training, on-the-job training and off-the-job training. On the other hand, production knowledge transfer activities included providing details about product standards and manufacturing methods, the joint design of components, and support for the suppliers' technical management. Based on semi-structured interviews conducted in both years, the authors conclude that the foreign subsidiaries were still frequently transferring production processes to the Malaysian suppliers in 2002, but that more of the partners had become involved in joint design and operations. In terms of training category, on-the-job training, which was most popular in 1996, had lost its top ranking to off-the-job training in 2002.

In another empirical work carried out specifically on tacit knowledge acquisition in China, Yin and Bao (2006) define method comprehensiveness as 'the knowledge acquisition methods employed by a given recipient firm'. Through interviewing IJVs' executives, they identified that repetitive, accumulative and bundling approaches were three effective knowledge acquisition methods that were used. They describe the repetitive method as a learning approach that allows a firm to engage repeatedly with its foreign partner and learn from the partner during this engagement. Under the accumulative method, a firm can learn cumulatively from its foreign partner. Finally, in the bundling method, a firm is able to acquire all of its partner's knowledge in bundles. Of all the tacit knowledge acquisition predictors, including for example embeddedness, motivation, collaborativeness and readiness, these authors empirically prove that method comprehensiveness, which comprise all three of the above learning mechanisms, is one of the most critical for the acquisition of tacit knowledge from the IJV perspective.

As well as the interactive learning mechanisms mentioned earlier, many other methods have been suggested as effective means of obtaining valuable sticky knowledge from foreign buyers. Given that this knowledge is subjective, experiential and difficult to transfer (Inkpen and Pien 2006; Nonaka et al. 2000a), the acquirer must use prior knowledge, skill and experience (Koskinen and Vanharanta 2002) that is related to the new external tacit knowledge in order to easily identify, assimilate and share it with co-workers. Even more important is that, the acquisition methods must integrate various interactive learning activities, such as partner meetings, the sharing of problem-solving

technology and performance feedback (Inkpen and Dinur 1998), as well as on-site visits and training (Modi and Mabert 2007). Using these interactive involvement methods, tacit knowledge can be obtained by the supplier when the foreign buyer provides product specifications, passes down process technology or demonstrates the technical skills that it expects the outsourcing supplier to use, so as to provide sufficient product quality and cost efficiencies. Given the importance and advantages of various interactive involvement methods for tacit knowledge acquisition, the following hypothesis is proposed:

H_3: Interactive involvement will positively facilitate the Malaysian suppliers' acquisition of the tacit elements in understanding their foreign buyers' requirements.

2.6.2 Relational capital

Relational capital is gaining attention as a concept that serves as an agent for enriching inter-firm relationships. This concept focuses on the basis of relationship formed between partners, which can be achieved through the interpersonal involvement of individuals engaged in the inter-firm collaboration. In their study on knowledge acquisition in IJV, Tsang et al. (2004) generally define relational capital as a relationship that has been developed through a history of interactions. They describe further that relational capital, or relationship capital, can also be described as the 'positive and beneficial sociopsychological aspect' of the relationships built between IJV partners.

However, for the purpose of this study, relational capital is viewed as a relationship that is positively developed through social embeddedness between international outsourcing suppliers and their foreign buyers.

In their short case study about leveraging tacit knowledge acquisition, Collins and Hitt (2006) confirm that relational capital facilitates the transfer of tacit knowledge among strategic partners. They emphasize the importance of trust, network connections and interactions in capturing the complete advantage of relational capital. These are among the most significant elements and essential in the exchange of tacit knowledge. In line with the important role relational capital plays in tacit knowledge acquisition, Lam (2000) shares the same view that, in order to fully realize the full potential of tacit knowledge, a firm must encourage participating individuals to become directly involved and cooperate closely with the collaborative partners. In an international business environment, most of the time, it is only through close relationships, interactions and a friendly environment that trust and commitment can be developed.

According to Inkpen and Dinur (1998), individuals are the most important medium for transferring tacit knowledge. In fact, the more tacit is the knowledge, the more the participation of individuals is needed. Therefore, the success of transferring or acquiring tacit knowledge is highly associated with individuals' deep involvement in the relationships between the transferor and acquirer. Yin and Bao (2006), who conducted a study about the acquisition of tacit knowledge in China, prove that individual embeddedness is highly significant in determining the success of knowledge acquisition

because it facilitates the richness of inter-firm relationships. Other than individual embeddedness, the authors also include other factors that affect tacit knowledge acquisition, such as individual motivation, a firm's willingness to establish a mutually beneficial relationship, a firm's readiness to acquire tacit knowledge, alliance origin and alliance experience.

The previous literature has not explained the relationship between business opportunity and relational capital in international outsourcing relationships. Nonetheless, it is believed that a close relationship developed between Malaysian suppliers and their foreign buyers through their business transactions would contribute to a greater level of tacit knowledge acquisition as well as opportunity recognition. A number of researchers have argued that the relational capital developed between partners can serve as a platform, providing greater opportunities to enter new networks and business relationships with other companies (Ahuja 2000). Collins and Hitt (2006) carry out a case study of Viewpointe Archive, a company that provides archive and retrieval services for financial institutions. They find that this company makes use of the relational capital developed through its business relationships to leverage tacit knowledge so as to serve customers and uncover new opportunities. Given the importance of relational capital to business collaborations, the current study focuses on trust, interaction and cultural sensitivity as the main relationship determinants of tacit knowledge acquisition and opportunity recognition in international outsourcing relationships.

2.6.2.1 Trust

Trust is a critical element when it comes to exchanging knowledge. Partners may find it difficult to share their knowledge before they have established a high level of trust with each other (Dhanaraj et al. 2004; Inkpen and Tsang 2005a). This is one of the reasons why Dodgson (1993a) and Doz (1996) identify trust as an essential criterion of successful knowledge transfer and creation. Social interactions between the partners are likely to help reduce the gap and develop trust (Collins and Hitt 2006), facilitating the knowledge transfer or acquisition process. Based on these arguments, it would be impossible to develop relational capital and acquire knowledge in a business relationship if the partners doubted or did not trust each other.

In the current study, trust is conceptualized based on the work of Doney and Cannon (1997). It is termed as the degree to which buyers and suppliers perceive each other as credible and benevolent. On the other hand, Hitt et al. (2000) and Kale and Singh (2000) view trust as the willingness to be vulnerable and state that partners are potentially exposed to opportunistic behavior because trust will lead them to perceive each other's actions positively. When firms have the intention to transfer or acquire tacit knowledge, trust is argued to be one of the factors that must be present during the exchange process. Collins and Hitt (2006) also assert that trust is crucial for tacit knowledge transfer. They highlight this further by saying that a firm can exploit the relational capital built through trusting relationships to acquire tacit knowledge from their partners. Once the tacit knowledge has been successfully acquired, the firm is then a step ahead of its competitors because tacit knowledge is recognized as a source of competitive advantage.

Indeed, if the partners trust one another, tacit knowledge can be acquired easily and speedily (Dhanaraj et al. 2004). Without doubt, trust is central to the exchange of tacit knowledge between partners (Adler 2001). Several interorganizational studies have investigated the influence of trust on knowledge acquisition, and many have verified the idea that trust is a vital predictor of learning from one's partners. For example, the studies of Dhanaraj et al. (2004) and Becerra et al. (2008) substantiate the previous arguments that tacit knowledge acquisition is in fact influenced by the development of trust between the partners involved in the transfer and learning process. Since their research looked at the impact of trust on the acquisition of tacit and explicit knowledge, it is interesting to note that they found trust to be related to the transfer and acquisition of the former type. In contrast, in their studies on knowledge acquisition in IJVs, Lyles et al. (2000) and Lane et al (2001) empirically prove that trust is not significant in determining the acquisition of tacit knowledge from IJV partners. It should be emphasized, though, that none of these studies examine the effect of trust exclusively on tacit knowledge.

Apart from inspiring the acquisition of tacit knowledge, trust also has the ability to be a relational agent of a firm's opportunity recognition. The development of trust in a business collaboration leads to the building of confidence between partners, which in turn stimulates the creation of new opportunities (Hyder and Ghauri 2000). If a partner is confident about the other party's business conduct and competency, then more opportunities and exchanges will be granted as a result of a trusted and reliable partnership. This view is reinforced by Uzzi's (1997) acknowledgement of the

importance of trust in providing access to precious and strategic resources and helping a firm to tolerate a partner's imperfections in business transactions. This means that even though if errors or defects are discovered, for example in delivery or product specifications, the responsible party may still be given the chance to continue in the business collaboration due to the strong foundation of trust between the partners. Moreover, trust could result in the sharing of important updates (Doney and Cannon 1997; Mohr and Spekman 1994), particularly tacit inputs, essential for improving manufacturing processes, technological capabilities, product development and business growth. Other opportunities will also be given to a trusted partner, such as providing access to existing business networks (Kale et al. 2000) and potential new markets (Lianxi et al. 2007). From the perspective of the current study, the suppliers will likely focus on the most fundamental aspects of the new and valuable tacit knowledge acquired during the learning process and exploit this knowledge in the most efficient way, leading to the discovery of greater opportunities. Based on these discussions regarding the benefits trust brings to an international outsourcing relationship, the following hypotheses emerge, linking trust with tacit knowledge acquisition, and with opportunity recognition:

H_{4a}: Trust between the Malaysian suppliers and their foreign buyers is predicted to be related with the acquisition of tacit knowledge by the suppliers.

H_{4b}: The more the Malaysian suppliers and their foreign buyers trust each other, the greater will be the local suppliers' opportunity recognition.

2.6.2.2 Interaction

Similarly to trust, interaction is critical in knowledge transfer and learning (Inkpen and Dinur 1998). The two are inter-connected in improving relational capital's effect on tacit knowledge acquisition. As Gulati (1995) and Kostova and Roth (2003) argue, repeated interaction contributes to the development of trust between partners because as time passes, the individuals involved in the partnership will learn about and better understand each other. Collins and Hitt (2006) support this notion, indicating that regular interaction between partners is an important criterion of trust-based relationships. In fact, they even claim that successful tacit knowledge acquisition requires a firm to engage in interpersonal interactions. On the same wave length, Eng (2005) concurs that physical and face-to-face interactions will ease the process of sharing tacit knowledge between partners. Therefore, firms that have the intention to acquire tacit knowledge should encourage their representatives to form personal relationships with their counterparts (Collins and Hitt 2006). As a result, once they believe their partners to be trustworthy, individuals may become more comfortable with opening up, sharing knowledge and providing sensitive information to them.

Larson (1992) and Nahapiet and Ghoshal (1998) describe interaction as the extent of social relationships between the firm and the customer. However, in this study, interaction is defined as behavioral actions and social relationships between a supplier and its foreign buyer. If this interaction increases, the intensity, frequency and breadth of information exchanged will also increase (Yli-Renko et al. 2001). Through interactions,

partners can access not only the explicit side of knowledge, but its tacit dimension too (Kogut and Zander 1996). Tacit knowledge that is embedded in individuals requires social and active interactions in order to be transferred because it is only this way that personal relationships are established, leading to the sharing of information between partners.

Through interactions within a business network, buyers and suppliers complement each other by exchanging information about their needs, capabilities and strategies concerning technology, logistics and quality. During the exchange process, the firms' network positions are enhanced as they learn about each other's competencies and behaviors (Fiol and Lyles 1985), build trust in each other (Dwyer et al., 1987) and establish a strong commitment to the relationship (Morgan and Hunt 1994). With the presence of interaction and trust, partners' reputations and networks can be improved, thus the firms are able to establish joint product development schemes, increase their investment in the relationship and engage in other business relationships that are connected to the network (Holm et al. 1996). Firms are more likely to engage in network arrangements when they need to exchange difficult-to-codify, i.e. tacit knowledge, and knowledge-intensive skills that are best transferred through collaborative information sharing. As well as this benefit, firms within a business network can take advantage of their external contacts to explore potential opportunities, test ideas and bring together resources to strengthen their competitive position in a particular industry or market.

The importance of interaction in the knowledge acquisition process has been investigated by Liu et al. (2009), in a study concerning organizational learning in international strategic alliances. Their empirical findings confirm the positive and significant role that interaction plays in knowledge acquisition from alliance partners. In addition, previous studies by Yli-Renko et al. (2001) and Puhakka (2006) provide statistical evidence that interaction benefits such knowledge acquisition. The essential implication of interaction is even greater when it comes to the acquisition of tacit knowledge in an international outsourcing relationship. Given the difficulty of transferring it, the geographical distance between outsourcing partners and abstract features of tacit knowledge may hamper its flow from the foreign buyer to the international supplier. According to Li et al. (2010) and Von Hippel (1988), close and intense interactions are the key instrument for the successful transfer of tacit knowledge across firm boundaries. Consistent with this view, a case study by Collins and Hitt (2006) proves that interaction is indeed one of the core relational capital factors that contribute to the effectiveness of tacit knowledge exchange between partners.

From the perspective of this study, interaction has the potential to affect tacit knowledge acquisition by the supplier, and in addition help it to detect future opportunities from the foreign buyer. Interactions between a supplier and its foreign buyer provide a favorable environment in which to nurture the partner relationship, which is an important element of the discovery of potential opportunities (Puhakka 2006; Yli-Renko et al. 2001). When the supplier and its foreign buyer frequently interact with each other, either in a social or organizational context, the sharing of valuable new knowledge and information about

new processes and technology may take place. This exchange will subsequently lead to the supplier's identification of various possible opportunities, such as obtaining new skills and finding ways to reduce production costs or enhance manufacturing processes. Overall, as Kuo-Hsiung and Gotcher (2008) argue in their article on relationship learning in international subcontracting relationships, interaction creates a set of opportunities and increases the possibility of knowledge and resource flows between partners.

Given the relevant of interaction in opportunity recognition, St-Jean and Tremblay (2011) emphasize that interaction helps partners to gather all the necessary information and get a better grasp of their future strategies, which in turn provides them with the ability to spot potential opportunities. Through the interaction with the other party, a partner will be able to identify opportunities so as to generate new business prospects, improve business performance (Johanson and Vahlne 2006), and create network ties (Boersma et al. 2003). More importantly, in an empirical study into the implications of social capital for opportunity recognition, the findings of Puhakka (2006) confirm previous arguments that interaction practically determines the proactive searching for future opportunities and needs. In the case of this study, a supplier is able to identify what it will need in the future and what opportunities it should seek in order to fulfill its future objectives by interacting and socializing with the foreign buyer. In most cases, a foreign buyer will have more experience in international business, belong to a wider business network and possess superior knowledge, production skills and technology.

Therefore, a supplier should get involved in activities that allow close and active interactions with its foreign buyer because through interaction, the foreign buyer may transfer knowledge and information voluntarily and share potential opportunities with the supplier. Johanson and Vahlne (2006) also point out the fact that new business opportunities can be developed through the process of interaction. Considering the importance of interaction for acquiring tacit knowledge and recognizing potential opportunities provided through international outsourcing relationships, the following hypotheses are formulated:

H_{5a}: Interaction between the Malaysian suppliers and their foreign buyers will have a positive effect on the suppliers' learning of the tacit elements of the buyers' requirements.

H_{5b}: Interaction between the Malaysian suppliers and their foreign buyers has a positive effect on the suppliers' opportunity recognition.

2.6.2.3 Cultural Sensitivity

Previous researchers have indicated that when companies from different countries collaborate, such as in buyer-supplier collaborations, the cultural differences between the partners will affect the business alliance (Frazier et al. 1989; Johnson et al. 1993; Lyles and Salk 2007). In most international business studies on cultural differences (Brouthers and Eliot Brouthers 2001; Drogendijk and Slangen 2006; Morosini et al. 1998; Tihanyi et al. 2005), cultural distance has been highlighted as the main topic of discussion. Cultural distance in international business relationships is concerned with differences in language, laws and regulations, business practices and consumer attitudes (Dong-Jin and

Jee-In 1998; Johanson and Vahlne 1990). If buyers and suppliers are unable to deal with conflicts evolving from the cultural distance between them, then it is difficult to maintain, let alone enrich the relationship (Nakata and Sivakumar 2001; Williams et al. 1998). Therefore, in an attempt to avoid cultural conflicts, suppliers should be sensitive to cultural differences between them and their buyers. In order to reduce misunderstandings and disagreements, sensitivity to national business culture is an important aspect of the cross-cultural adaptation (Kelley and Spekman 1994).

Cultural sensitivity involves a firm's awareness about its partner's cultural differences. LaBahn and Harich (1997) use cultural sensitivity to refer to the effort a firm makes to understand and adapt to the business culture of its international partner. Johnson et al. (1996) view cultural sensitivity as a firm's awareness of the cultural differences between it and its partner, and its ability to deal with and manage these differences. The term is also used to explain a firm's ability to intensely understand its partner's culture (Voss et al. 2006) and adapt to cultural differences. Drawing from the definitions of cultural sensitivity by Johnson et al. (1996) and LaBahn and Harich (1997), for the purpose of this study, cultural sensitivity is defined as a supplier's awareness of differences between its own and its foreign buyer's national business cultures and its ability to approach, adapt to and manage these differences. From the context of international business collaborations, cultural differences or cultural distance between partners from different countries have been viewed as obstacles to collaborative commitment and knowledge flow (Rodriguez et al. 2003). This view is also supported by knowledge management scholars (Lyles and Salk 1996; Mowery et al. 1996), who state that cultural

misunderstandings and differences can create difficulties in learning and knowledge transfer. In line with these notions, Yamin and Sinkovics (2006) add their point of view, asserting that cultural distance between partners from different countries intensifies the complexities of relationship learning. In a cross-border scenario concerning alliance learning between Singapore and China (Inkpen and Pien 2006), the transfer of knowledge, particularly tacit knowledge, from the Singaporean expatriates to the Chinese managers encounters difficulties due to the cultural distance between the two parties. The finding of this case study indicates that when a supplier misunderstands or is reluctant to recognize the cultural differences between it and a partner, the acquisition of tacit knowledge could be slower and much more challenging. Thus, a supplier should make an effort to be more culturally sensitive and adapt to its foreign buyer's business culture in order to fully capture this valuable knowledge.

Cultural sensitivity is one of the factors that is fundamental to the development of trust between partners in an international buyer-supplier relationship because it improves the effectiveness of communication and reduces the risk of conflicts and misunderstandings that may be caused by cross-cultural differences (Dodgson 1993b). Once these negative elements have been reduced in an international outsourcing relationship, factors such as learning, trust, cooperation and shared decision making, are expected to develop between the buyer and the supplier (Lai Xuan and Truong 2005). As a result, both partners can thereon refrain from opportunistic behavior, which in turn will positively affect integrity, tolerance and concern within the cross-border buyer-supplier relationships (Skarmeas et al. 2002).

Cultural sensitivity will also promote trust, respect and understanding (Lai Xuan and Truong 2005) required for the development of buyer-supplier relational capital, which should be established in order to successfully acquire valuable tacit knowledge from a foreign buyer. In their study of 97 dyads of US and Japanese electronics firms, Voss et al. (2006) find that cultural sensitivity is a significant predictor of the exchange of high-quality information between the US and Japanese partners. They describe such information as important information that is essential for competitive advantage, interfirm relationships and goal execution in dynamic markets. These descriptions fit the role of tacit knowledge as a strategic resource that facilitates the development of a firm's core competencies and competitive advantage. Consistent with these explanations, it can be argued that high-quality information is mostly composed of tacit knowledge components, which implies that cultural sensitivity is also expected to positively affect the supplier's tacit knowledge acquisition in an international outsourcing relationship.

Moreover, cultural sensitivity may also help a partner to recognize potential opportunities in an international collaborative partnership. Besides assisting with knowledge transfer and information exchange, cultural sensitivity provides a basis for the identification of potential opportunities. A firm must be aware of the differences between its own and its partner's business cultures and develop the ability to understand these differences. It is expected that tolerance and flexibility towards culture differences will enrich the relational capital between a firm and its foreign partner, which in turn will increases the potential to gain access to important business opportunities. In addition, sensitivity to a partner's national business culture may result in a firm

discovering new and effective ways to improve its capabilities and overall performance. By showing respect for the foreign buyer's national business culture and proving that it has the willingness to acculturate, the supplier will gain the buyer's trust and confidence. As a result, various opportunities will emerge, including the chance to learn the latest production processes, being referred to new business clients and being consulted on new product developments.

However, it should be noted that a foreign buyer's willingness to provide or share any opportunities with the supplier is unlikely to be cultivated if the supplier does not attempt to understand and tolerate the buyer's business culture. As argued by Simonin (1999), cultural asymmetry causes problems and limits a partner's chances of detecting valuable market opportunities, hence making it hard for a partner to maximize the advantages deriving from a collaborative relationship with an international business client. Based on the above discussions about the effects of cultural sensitivity on a supplier's tacit knowledge acquisition and opportunity recognition, the following hypotheses are proposed:

H_{6a}: The greater is the Malaysian suppliers' sensitivity to their foreign buyers' business cultures, the more tacit knowledge they will acquire through their international outsourcing relationships.

H_{6b}: Greater cultural sensitivity towards their foreign buyers' business cultures positively affects the Malaysian suppliers' opportunity recognition.

2.7 Supplier's Tacit Knowledge Acquisition and Capability Enhancement

In his article on knowledge integration and organizational capability, Grant (1996a, p. 337) defines a firm's capability as 'a firm's ability to perform repeatedly a productive task which relates either directly or indirectly to a firm's capacity for creating value through effecting the transformation of inputs into outputs'. Similarly, Collis (1994, p. 145) refers to firms' capabilities as 'the socially complex routines that determine the efficiency with which firms physically transform inputs into outputs'. In the context of the current study, the definition of capability enhancement is established based on the description of various concepts related to organizational capabilities. It is defined as the supplier's ability to effectively integrate internal and external knowledge and competencies in order to grow and survive, while also keeping pace with the changing business environment (Gold et al. 2001; Grant 1996a).

By exploiting knowledge and competencies in an efficient way, a firm's capabilities can be upgraded and used to increase overall organizational performance. Collins and Hitt (2006) observe that a firm that possesses capabilities that differentiate it from its competitors, in terms of providing better value, is expected to have the potential to create increased competitiveness. They further argue that a firm is in a better competitive position compared to its rivals if it has the capability to acquire tacit knowledge from its partner and then disperse that sticky knowledge internally. Indeed, as mentioned earlier, it is recognized that the acquisition and application of tacit knowledge is crucial in positioning a firm's competitive advantage (Inkpen and Dinur 1998) and enhancing its capabilities (Makhija and Ganesh 1997).

Through the acquired tacit knowledge, a firm can improve its value creation and efficiency by enhancing its capability to innovate and respond to changing customer needs (Ulrich and Smallwood 2004), increase organizational learning and product development (Collis 1994) and finally utilize manufacturing flexibilities and short development cycles (Grant 1996a). All of these abilities can be enhanced through the internal application of the tacit knowledge obtained from an international outsourcing relationship. Several researchers have linked a firm's capability with the ability to acquire resources from its environment and manage its network relationships (Uzzi 1997; Zaheer et al. 1998). From the perspectives of RBV and network theory, a firm's network, be it with suppliers, customers or competitors, can be exploited as a strategic source of improved competitive advantage (Andersson et al. 2005a) and gain access to information, resources, markets, technologies and new opportunities (Gulati 1995). Therefore, business networks can help a firm to gain valuable resources, including tacit knowledge, from external social connections, resulting in the development of advanced skills or new manufacturing capabilities.

The research of Subramaniam and Venkatraman (2001) has empirically proven that the transfer and deployment of tacit overseas knowledge positively contributes to the enhancement of transnational new product development capabilities. The significant relationship between tacit knowledge acquisition and capability enhancement can also be observed in a study conducted by Cavusgil et al. (2003), who found support for the importance of tacit knowledge in enhancing firm capability. Specifically, their results indicate that the tacit knowledge transferred can actually enhance a firm's innovation

capability. The implication for this study is that an ambitious supplier, aiming to stay competitive in the international outsourcing arena, should acquire more tacit knowledge from their foreign buyer and exploit this valuable knowledge so as to enhance its overall capabilities. In line with this view, the relationship between the supplier's tacit knowledge acquisition and its capability enhancement is hypothesized as follows:

H_7: Tacit knowledge acquisition from international outsourcing relationships is positively related to the Malaysian suppliers' capability enhancement.

2.8 Supplier's Tacit Knowledge Acquisition and Opportunity Recognition

Opportunity is one of the main concepts discussed in the entrepreneurship literature (Hadjikhani et al. 2005b) because it is relevant to entrepreneurs, who actively seek opportunities. From the entrepreneurship perspective, Eckhardt and Shane (2003, p. 336) define opportunities as 'situations in which new goods, services, raw materials, markets and organizing methods can be introduced through the formation of new means, end or means-ends relationships'. It shows that an entrepreneur or firm can make use of existing activities and resources to generate new valuable opportunities. On the other hand, Hadjikhani et al. (2005a, p.9) view opportunity as 'the act of entrepreneurs with visions and coordinative capability aiming at an end of a "short-term" means and end relationship'. Accordingly, a firm with various capabilities can have a strategic plan aimed towards finding cues and prospects for developing new business opportunities, and these can be discovered through business collaboration with a partner of superior capabilities and competitive advantage. The search for new opportunities is related to the

concept of opportunity recognition, which Lumpkin and Lichtenstein (2005, p.457) define as ‘a firm’s ability to identify a good idea and transform it into a business concept that adds value and generates revenue’. This ability helps firms to perceive the possible ways of creating new business opportunities that can improve the value and position of the current business.

Opportunities can be classified into market opportunities and technological opportunities. Market opportunities arise when at least two parties exchange resources, and technological opportunities refer to new ways of combining resources without necessarily exchanging the new combination with other parties (Andersson et al. 2005b). While market opportunities are related to potentially finding new geographical markets, technological opportunities are associated with the creation of new products or services, the discovery of new raw materials, new methods of production or new ways of organizing (Andersson et al. 2005b). These opportunities are recognized as the instruments of change (Schumpeter 1934), which can be used if a firm plans to reform its organizational or business strategic direction. The process of finding these opportunities is termed opportunity recognition, which is defined in this study as the outsourcing supplier’s discovery of a route for creating potential new businesses and possibly enhancing its current business position and profits.

The importance of resources and capabilities in motivating alliance formation is said to be closely related to the RBV of the firm (Barney 1991; Gulati 1999). A firm will use its resources and capabilities as means to attract business relationships through its network

and to explore potential opportunities within the relationships. Since tacit knowledge is one of the most important strategic resources, its acquisition and application provides the basis to enhance a supplier's capabilities, which may subsequently result in the development of more opportunities. Along the same lines, Subramaniam and Venkatraman (2001) indicate that the tacit knowledge stock enhances the firm's ability to perceive, which may result in it recognizing better innovations and exclusive market opportunities.

According to Yli-Renko et al. (2001), newly acquired knowledge that is related to the firm's existing knowledge widens the firm's range of knowledge acquisition opportunities. This leads to the assumption that the more knowledge a firm acquires, the more learning opportunities will be generated. With an increase in the tacit knowledge stock and capacity, it is possible that the supplier will easily detect potential opportunities that it was unaware of prior to acquiring the new knowledge from its foreign partner. Based on the above discussions, the following hypothesis is proposed:

H_8: Tacit knowledge acquisition learned through international outsourcing relationships positively affects the Malaysian suppliers' opportunity recognition.

2.9 Supplier's Capability Enhancement and Opportunity Recognition

It can be argued that when a supplier's capability is enhanced after acquiring knowledge from a foreign partner, the firm will receive more opportunities (Andrews 1980), which

can be captured through its interaction and participation with partners from various business loops. Practically, an improvement in capabilities allows a supplier to increase its efficiency in several areas, including the manufacturing process, innovative creation and new product development. Due to these improvements, the supplier may recognize potential opportunities to create, utilize and coordinate its existing and new resources through its supply chain network (Lorentz and Ghauri 2010). Consistent with this perspective, a supplier's capability enhancement helps it to perform well in its international outsourcing relationship, meeting or exceeding the buyer's expectations through greater outsourcing performance. As a result of the supplier's good business reputation and committed partnership, it may obtain opportunities to learn from its foreign partners, create new knowledge and connect with larger and strategic business webs (Johanson and Vahlne 2006). It should be emphasized that a firm's competitive advantage is not only determined by its business operational effectiveness, but also by its ability to identify and exploit opportunities within a network of extended business partners, thus outshining its competitors (Andersson et al. 2005b).

In an international outsourcing relationship, the supplier depends on its foreign buyer to provide valuable new knowledge and enhanced profits. Along the way, the supplier will make an effort to improve its capabilities and the business relationships with an eye on future business deals. If the partnership works well, strong interpersonal relationships between the partners will lead to more potential business opportunities within a larger business network (Gulati and Gargiulo 1999) and potentially important strategic tips from the foreign counterpart on how to increase business performance. For example,

with a reliable and trusted partner, the foreign buyer will possibly share constructive inputs pertaining to new business contacts and market activities, updated technological information and production development, as well as advice on appropriate organizational structure and business conduct (Pahlberg and Thilenius 2005). Furthermore, capability enhancement can be a source of opportunity recognition since it allows the firm to find better ways of creating value and responding to competitive pressures. Nevertheless, these opportunities cannot be identified without sufficient improvements in the supplier's efficiency and greater international experience. Accordingly, the following hypothesis is put forth:

H_9: The Malaysian suppliers' capability enhancement is positively linked to their recognition of future business opportunities.

Figure 1 illustrates the conceptual framework and locations of the hypotheses regarding those elements that affect tacit knowledge acquisition and its impact on the supplier's capability enhancement and opportunity recognition.

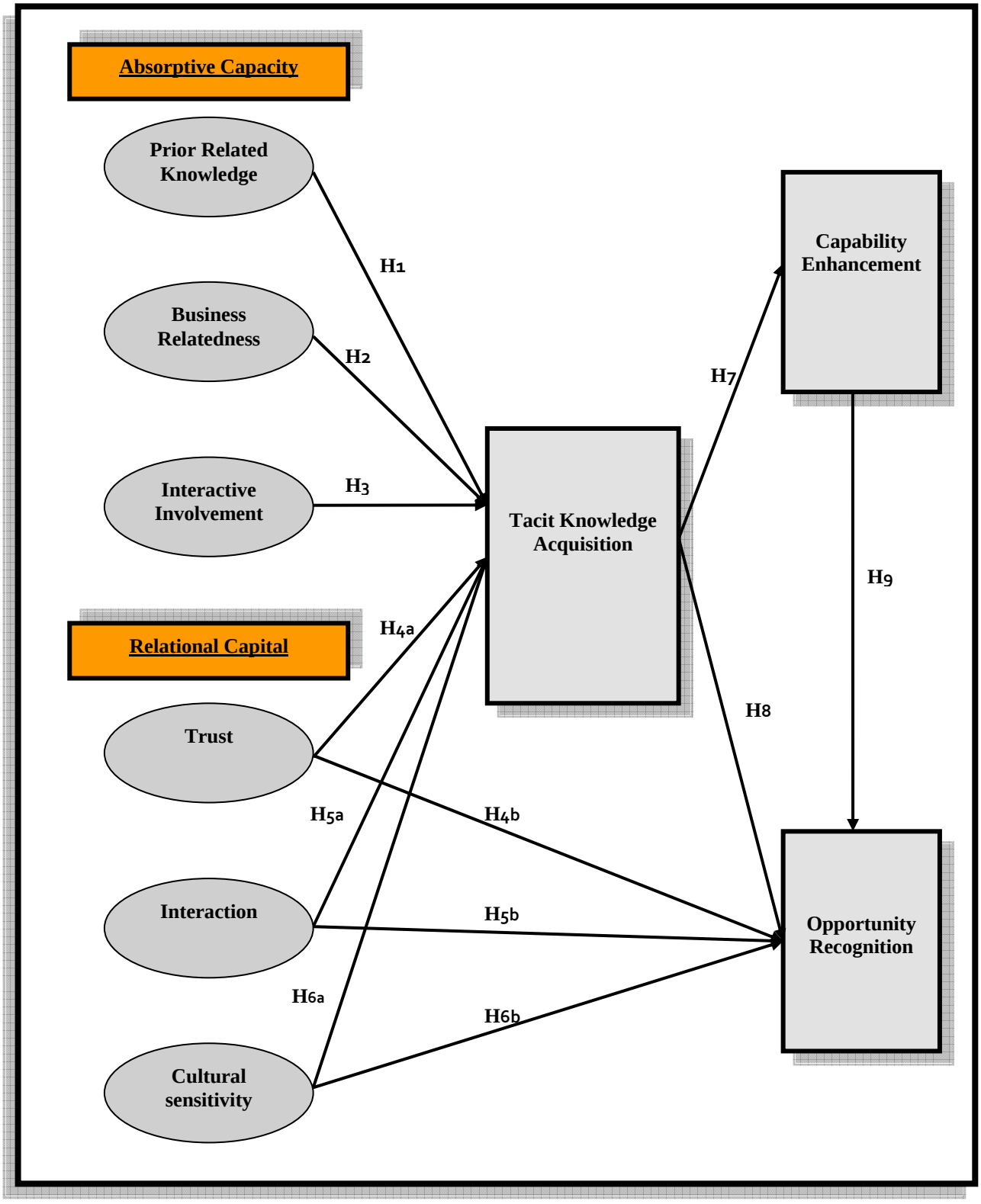


Figure 2.1 Conceptual Model and Locations of Hypotheses

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This study explores the nature of tacit knowledge acquisition in an international outsourcing context, viewed from the supplier's standpoint. Using the empirical research method, the study aims to discover the factors, conditions and effects that managers should contemplate when deciding to involve themselves in acquiring tacit knowledge through international business partnerships with foreign companies. Various methodological issues have to be examined and explained when an empirical study is carried out. Therefore, this chapter covers the justification of specific areas that were addressed in the development of the research methodology. It starts by introducing the research design applied in the study. The next section reviews the sampling process and its arguments. The section after that covers a number of issues considered during the questionnaire development. The last section focuses on the operationalization and measurement of each construct, as well as considerations regarding each instruments employed in the final questionnaire.

3.2 Research Design

This research primarily based around a structured questionnaire. A survey technique was chosen over other methods for several reasons: (1) the survey method provides valuable data that can be used in model and hypotheses testing, (2) the facts and figures gathered through survey instruments can be used to spot any patterns in the data and relationships

between variables, (3) survey data is helpful in testing the significance of results, (4) the survey method is a cost and time-effective approach for obtaining information and data from a large sample, (5) survey items can be developed using validated and established instruments from previous studies, and (6) survey research allows the result generated from the data to be generalized to an identified population. For all these reasons, a survey is preferred in this study. In summary, the method enables several statistical analyses to be carried out and takes care of the issues of generalization and a large population. Further, some of the procedures, data, statistical tests and results carried out here would be difficult to compose or justify using secondary data.

In terms of measurement, the majority of the items used in the survey were drawn from validated and reliable measurement scales published in previous studies. Concurrently, a number of questions in the interactive involvement construct were newly developed based on the existing organizational learning literature, especially from various works on knowledge acquisition and knowledge transfer. All items were measured with seven-point Likert-type scales. With the exception of the items in the interactive involvement and tacit knowledge acquisition constructs, all items were anchored as ‘strongly agree’ to ‘strongly disagree’. For the interactive involvement construct, the participants were asked to determine how often they experienced a specific interactive involvement method when acquiring tacit knowledge from their foreign buyers. Thus, the responses were rated on a Likert scale ranging from ‘never’ to ‘always’.

3.2.1 Unit of analysis

In each part, the unit of analysis in this study was clearly aimed at the organizational level. In this case, the organizations are local supplier companies that assemble or sell finished products or components to foreign buyers. After short-listing supplier companies, the surveys were mailed to managers in those companies, asking them to describe how their companies acquired tacit knowledge from foreign buyers. Although this study relied greatly on individual responses, the managers were then asked to represent their companies when responding to the survey. Thus, it was hoped that their viewpoints would be closely related to those of their companies, and what they thought about a particular subject of discussion, would also reflect their companies' position.

On the other hand, there are also studies that focus on individuals as the unit of analysis. The targeted individuals are expected to answer survey questions according to their individual personal perspectives. Studies on an individual basis are commonly conducted in marketing and human resource management areas that often deal with consumer and employee behaviors. In other cases, the unit of analysis may be centered on selected groups. An example of a study that applies groups as the unit of analysis is that by Cummings (2002). It uncovers valuable findings about the consequences of work groups, structural diversity and knowledge sharing in a global organization.

3.3 Sampling Process

3.3.1 Population and sample

The population in this study consists of Malaysian small, medium and large manufacturing suppliers, who receive outsourcing contracts from foreign clients. The rationale for selecting manufacturing is that for years this industry has contributed significantly to Malaysian economic growth. In February 2008, the Malaysian Minister of International Trade and Industry (MITI) announced that the manufacturing sector was still the most important sector in the Malaysian 2007 economic outlook (MIDA 2008). In 2007, besides emerging as the main contributor in terms of employment in Malaysia, the export of manufactured products also recorded the highest percentage of all exports from the country, compared to other commodities. In that year, the manufacturing industry contributed 74.8 percent of Malaysia's total exports (MIDA 2008). In the 2009 National Budget, the Prime Minister of Malaysia, Abdullah Haji Ahmad Badawi announced that the government was not only committed to providing a conducive environment, but had also allocated a significant amount of resources to the manufacturing industry.

The specific sampling frame focused on some of Malaysia's most important manufacturing industries such as electrical and electronics (E&E), chemicals and petroleum, machinery and equipment and automotive. These industries were chosen as they have been emphasized by the Malaysian Industrial Development Authority (MIDA), Malaysia's Ministry of International Trade and Industry (MITI) and various related departments as having a significant impact on Malaysia's exports and industrial

growth. As well as this, all four selected industries need to stay in line with new knowledge, skills and technological progress. To keep up with the latest technological advancements and intense competition, their core technological development must be upgraded regularly. If they lack technological advances, local manufacturing suppliers will have to proactively learn new knowledge, including tacit knowledge, from their foreign buyers. It is hoped that through buyer-supplier relationships, the foreign buyer, who has better manufacturing competencies, will provide the local supplier with tacit knowledge that is critical for their capability enhancement. Indeed, in some cases, the suppliers together with their foreign buyers gain tacit knowledge through determining what is lacking and what can be improved when the components are put together as a complete finished product.

3.3.2 Sampling frame

A comprehensive list of manufacturing firms in Malaysia can be found in an official and authoritative directory published by the Federation of Malaysian Manufacturers (FMM). This organization was established in 1968 and was set up to promote the interests and growth of its member companies, locally and internationally. With the slogan 'The Voice of the Malaysian Manufacturing Industry', FMM has opened the way for the members to develop and given them an initial push, thus contributing to the country's vision. The publication of the FMM directory helps manufacturing companies to promote their businesses to local or international customers. The version used in this study was the latest on the market, entitled the 'FMM-Directory of Malaysian Industry – 39th Edition 2008'. It lists around 3,000 manufacturing and service companies, from both

the private sector and government bodies. Important information about each member company is also included, such as company revenues, total number of employees, type of products manufactured, export destination, complete address and key contact person. The directory also provides extensive company profiles, a synopsis of the Malaysian economy and some brief information about doing business in Malaysia. Multiple industries were selected to increase the generalizability of the study (Shadish et al. 2002). Therefore, four major manufacturing industries were identified as making significant contributions to the country's industrialization and economic growth. Besides, these industries are most suitable and related to this research as they have to constantly catch up with the latest updated knowledge, skills and new technology. Realizing their importance for the future, the government has attempted to help these industries with investment and promotion, so as to ensure they are globally competitive and can consequently contribute to the country's Vision 2020.

Not all of the thousands of Malaysian suppliers registered in the FMM directory were considered suitable for this study. Some are categorized under other industries, which are not involved in international activities. Listed below are some general but important criteria satisfied by the Malaysian manufacturing suppliers selected as respondents in this study:

1. Malaysian companies engaging in export activities.
2. Involved in either one of the following four industries:
    (a) Electrics and electronics
    (b) Chemicals and petroleum

(c) Machinery and equipment

(d) Automotive industry

3. Manufacture or assemble finished products or components for foreign buyers. It should be noted that the majority of the Malaysian manufacturing exporters listed in the FMM directory are either manufacturing or assembling products for the international buyers.

3.3.2.1 Electrical and electronics industry

As highlighted in MIDA's brochure, E&E industry ranks as the top manufacturing industry in Malaysia due to its remarkable contribution to the country's economic performance, especially in terms of employment, manufacturing output and exports. In addition, it has long been the largest earner of export revenues for Malaysia. In 2007, despite experiencing a slight decrease, the E&E industry still made up the highest percentage of Malaysia's manufacturing and total exports at 58 and 44 percent respectively (MIDA 2008; Tippu 2008). The E&E industry is also credited with having a huge effect on Malaysia's economic growth, considerably boosting the country's performance from the perspectives of foreign exchange earnings and gross domestic product growth (Koi Nyen and Tuck Cheong 2008).

The E&E industry in Malaysia can be divided into three broad sectors:

(a) Consumer electronics

This sector remains one of the most attractive and eminent areas in the Malaysian E&E industry. In 2007, it was proclaimed as showing positive potential to maintain its large

proportion of the country's E&E exports (Raj 2007). One of the reasons this industry is growing steadily in Malaysia is due to the fact that the global demand for consumer electronics goods is also showing robust growth. The wide range of products classified in the consumer electronics sector include various entertainment and communication devices. Examples include home theater systems, digital cameras, LCD and plasma screen displays, MP4 players and GPS automotive navigation.

(b) Industrial electronics

The production of the industrial electronics sector comprises information, communication and technology (ICT) products, such as computers and computer peripherals, data storage devices and telecommunications equipment. This sector is characterized globally by dynamic growth and fast-changing trends, which increases international outsourcing activity. In response, Malaysian suppliers serve foreign manufacturers by producing and supplying the components for various product lines, including data storage devices, computer networking equipment, mobile phones, broadcasting and transmitting equipment.

(c) Electronic components

Malaysia's semiconductor subsector is not only important within the E&E industry specifically, but has also been identified as the most important of the high-tech industries (Abdullah 2006). In 2003, this sector represented 42.8 percent of Malaysia's total exports of electronic products (MIDA 2004), making it the largest contributor to the country's electronics industry that year. Furthermore, as pointed out in the UNCTAD

Handbook of Statistics 2006-2007, Malaysia's semiconductor subsector has positioned itself among the world's five main exporters of semiconductor products and the country has been identified as one of the world's most favorable locations for semiconductor assembly, testing and packaging (MIDA 2004). Other activities in this subsector include the production of semiconductor devices ranging from microprocessors, memory chips and opto devices, to integrated circuits and silicon wafers.

3.3.2.2 Chemicals and Petroleum Industry

According to MIDA's (2008) report on Malaysia's performance in the manufacturing and service sectors in 2007, the chemicals and petroleum industry recorded the second highest sales, accounted for 30 percent of the total sales in Malaysia's manufacturing sector. In comparison, E&E industry, which ranked first in sales, constituted 36.9 percent of the total sales for manufactured products. Among the outstanding subsectors in the chemicals and petroleum industry are petrochemical and oleochemical. Malaysia has recognized the full potential of these subsectors, realizing that they are showing optimistic progress from an economic point of view. Several initiatives have been taken by the government and its agencies to increase the competitiveness, reputations and strategic positions of the petrochemical and oleochemical subsectors. These include giving necessary tax break incentives to local and foreign companies, and improving and developing facilities and infrastructures related to the two subsectors. For instance, in an effort to secure local and foreign investment, the government has initiated the development of two complex petrochemical facilities in a planned industrial township located in the East Coast Industrial Corridor of Peninsular Malaysia (Ishak 2008).

With reference to the petrochemical subsector, the Malaysian government has undertaken numerous initiatives, as this subsector is now deemed significant in attracting foreign direct investment and helping to nurture Malaysian economic growth. In general, petrochemicals are chemicals obtained from petroleum, natural gas or other hydrocarbon sources. They can be used in the production of major end-products, such as polymers, plastics, synthetic fibers and chemical fertilizers. In 1999, the Economics Department Monetary Authority of Singapore brought to light that Malaysia was one of the locations with lowest cost location for petrochemical production in Asia Pacific. This is mainly attributed to the availability of oil and gas reserves in Malaysia, both major resources in the manufacture of petrochemicals. In 2008, the Department of Statistics Malaysia (2008) reported that the Malaysian petroleum industry had demonstrate amazing performance in 2008 with crude petroleum, liquefied natural gas (LNG) and other petroleum products ranking third, fourth and fifth respectively, in terms of the country's export earners. Malaysia's petroleum industry also shines on the world stage, maintaining its status as the world's top exporter of LNG. Based on a statement by the Energy Information Administration (EIA 2003), which reports official energy statistics from the U.S. government, Malaysia was the world's third largest exporter of LNG.

From another perspective, the Chemical Industries Council of Malaysia (CICM) has shown that Malaysia is among the world's major producers and exporters of basic oleochemical products, namely fatty acids, fatty alcohols and glycerine. The main explanation for this is that Malaysia is a major producer and exporter of palm oil (Kessler et al. 2007; Puah and Choo 2008; Teoh 2002; Ting 2001) and palm kernel oil

(Vries 1984), both natural resources that contain fatty acids. Basically, oleochemicals are chemicals obtained from natural oils and fats, either plant or animal based. They are important inputs in the production of soaps, detergents, paints, personal care products and cosmetics, and pharmaceutical products.

3.3.2.3 Machinery and Equipment Industry

The machinery and equipment (M&E) industry is becoming an increasingly significant sector area in Malaysia's economic and industrial development, due to its connection with other economic industries such as manufacturing, agriculture, construction, transportation and mining (MITI 2006). Acknowledging its contribution to the manufacturing sector and the country's competitiveness as a whole, the Malaysian government has chosen the M&E industry as one of the major segments requiring serious attention pertaining to its future growth and development. Recognizing it as a highly value-added and technology-oriented industry, the government has set out a vision for Malaysia to become a regional hub for advanced technology and specialized M&E products (MITI 2007). The M&E sector has also been targeted through the development of a focal point for M&E regional trading and distribution centers. In addition to these aspirations, an M&E technology center, known as the National Center for Machinery and Tooling Technology was put into operation in April 2005. The center, which is located in Rasah Industrial Park, is intended to play a role as a hub, providing all-in-one integrated M&E product solutions, ranging from product design to service customization, product manufacturing and product packaging. This is a strong move, proving the government's serious involvement and commitment to enhancing the

development of Malaysia's M&E industry. Another important indicator of the government's support for the M&E segment is that the industry is highlighted in its long-term industrial strategy. In 2006, the government launched the Third Industrial Master Plan (IMP3), designed to guide the development of the Malaysian manufacturing and service sectors from 2006 to 2010. The aim of the plan was to encourage both sectors to innovatively respond to the competitive global challenge and technological advancements. One of its main targets was to facilitate M&E's move to the next level. The M&E industry certainly has the capability to cater for the operational and technological needs of other manufacturing industries and to contribute to improving their effectiveness and efficiency. Therefore, the expectation of IMP3, is to witness higher value-added activities and productivity (Tham and Kwek 2007), thus enabling the country's manufacturing sector to establish itself on a global front. Therefore, the M&E industry has been brought under the spotlight in IMP3, together with other manufacturing industries such as E&E, petrochemicals, palm-oil based products, pharmaceuticals, textiles and apparel, metals and transport equipments (MITI 2006).

As mentioned earlier, M&E products and services are critical inputs to other industrial manufactured end products. The M&E industry is crucial to industrial sectors, such as E&E, oil and gas, construction, agriculture, automotive and other supporting sectors, in many ways. Besides making components, machinery and equipment, Malaysia's M&E manufacturers also serve other industries by offering supporting activities such as R&D, product and engineering design, fabrication, assembly, logistics, packaging and

certification (MIDA 2006). They have the ability to cater to almost every industry and company, both locally and internationally.

3.3.2.4 Automotive Industry

The automotive industry is a high profile manufacturing segment in Malaysia's industrial setting, at the heart of the government's long-term master plan, Vision 2020. This strategic vision was initially announced in 1999 by the former Prime Minister, Tun Dr Mahathir Mohamad. The primary mission of this long-term vision is for the country to become a developed and industrialized nation by 2020 (Ahmed and Humphreys 2008). Also emphasized on the agenda is that Malaysians will become a knowledge-oriented society (Saloma-Akpedonu 2008). Thus, through the establishment of two Malaysian automobile manufacturers, Perusahaan Otomobil Nasional Bhd. (Proton) and Perusahaan Otomobil Kedua Sdn Bhd (Perodua), it is highly anticipated that Malaysia's automotive industry could help to accelerate the industrialization of the Malaysian economy and aid the realization of Vision 2020 (Arshad 2001; Mahidin and Kanageswary R 2004).

Proton was established in 1983 by Malaysia's former Prime Minister, Tun Dr. Mahathir Mohamad, who first came up with the idea of Malaysia producing its own national car (Star 2009). As a result, the first Malaysian car, called the Proton Saga, and manufactured by Proton, was officially launched in 1985. Perodua, another national car manufacturer, was formed in 1993. Its first national car, the Perodua Kancil, named after a mouse deer, rolled off its assembly line in 1994. In comparison with Proton, which

focuses on producing sedan cars, Perodua aimed to meet a different market niche - compact cars (Sidhu 2009). From its origins as a car assembler, in turning itself into Malaysia's first car manufacturer, Proton is considered a major national achievement. Meanwhile, Perodua's performance has continued to improve over time, mostly due to its persistent effort to produce new cars that are catchy and attractive, yet customer-oriented and full of practical features, such as their compact size, fuel-saving technology and affordability (Star 2009). The company is an example of a successful story about international joint venture between a Malaysian company and its Japanese partners. Through this partnership, Perodua has had the advantage of gaining access to Japanese product development and manufacturing expertise (Schweinsberg et al. 2006), which is part of the reason for its victory over its main rival, Proton. In 2005, Perodua finally outperformed Proton in terms of sales (Schweinsberg et al. 2006; Star 2009). Since then, Perodua has maintained its position as the main seller of Malaysian-made cars in Malaysia. Both Proton and Perodua also aggressively market their cars in various countries, including the Middle East, South Africa, Australia, the United Kingdom, Brunei, Cyprus and China, to name a few.

The accomplishments of Malaysia's national car projects and the growth of the country's automotive industry have inspired the development of many other supporting and related industries. This has added to the worth of Malaysia's automotive industry, attracting a number of major world automotive players, such as Honda, Toyota and Mercedes Benz, to set up car assembly plants in Malaysia. One of the objectives behind this strategic approach is to take advantage of the cost-competitive and quality of automotive parts

made in ASEAN countries (Iwatake 2005). ASEAN consists of ten countries, including Malaysia, Singapore and Thailand. Other than Malaysia, Thailand is another competitive location for global automotive manufacturing. Known as the 'Detroit of Asia'(Hill and Fujita 2007), Thailand is ranked top among Southeast Asian automotive industries. Major global automotive players, including General Motors, Ford, Honda, Toyota and Volvo, have made Thailand the hub for their automotive production in the Southeast Asian region (Ngui 2003). However, although the Malaysian automotive industry has been ranked second behind Thailand (EIU 2005), it has a market advantage over Thailand since its domestic demand for passenger cars is the highest in the region (Fernandez 2008; MIDA 2007).

The attractive automotive industry in Malaysia and other ASEAN countries has also caught the attention of foreign manufacturers, who have chosen to manufacture an extensive range of automotive components in the country (MIDA 2007), including engine parts, body panels and automotive electrical parts. On the other hand, the local suppliers are making their presence felt in the local market too, benefiting from government support and incentives. According to a report by Singh (2006), there were around 590 suppliers in Malaysia in 2006, selling automotive components to local and international automotive manufacturers. Of these suppliers, 70 percent were locals. They have become proactive in promoting and selling their automotive products internationally, thus competing alongside other global suppliers. Among the major foreign clients of these suppliers are from the ASEAN region itself, Taiwan, South Korea, Germany, Japan and the United Kingdom.

3.3.3 Sampling procedure

In this study, the multi-stage cluster sampling was applied, which involved dividing the population into clusters and selecting a specific subsample by using a couple of sequent stages (Hair et al. 2007). The technique was used to divide the whole population of FMM manufacturers into groups and then narrow them down to a selected sample. The first stage involved the selection of the four industries mentioned above, namely E&E, chemical and petroleum, machinery and equipment and automotive. Fortunately, the manufacturing companies had already been classified in the directory according to industry type and location (thirteen states and three federal territories). This expedited the sorting and clustering processes.

In the second stage, the final sample was selected by identifying manufacturers based on their export destinations, which were displayed in the company profiles. The rationale for this selection criterion was due to the fact that the manufacturers with exporting activity were deemed most likely to be either producing or assembling manufacturing products for their foreign buyers. This resulted in 535 local manufacturers in the four identified industries that met the criteria, and were most probably involved in international outsourcing activities. At this point, all 535 short-listed manufacturing companies were included in the final sample of this study. This is known as the census method, since all units in the population were used in the final sample and their data would be gathered for further analysis. This method would typically be employed if the whole population was small, thus using a larger initial population would be the best way of obtaining higher response. Perhaps, to some researchers, 535 manufacturers would

not be considered a small sample size. However, knowing the academic research scenario in Malaysia, researchers would expect to receive a low response rate, particularly if the target population involved companies. Therefore, in this study, it was hoped that by starting with a large sample size, the final number of completed returned questionnaires would be sufficiently higher.

3.3.4 Key informant considerations

The key informant technique was used for the data collection. This technique has been widely adopted in many studies of interfirm relationships (Johnson et al. 1996; Kaufmann and Carter 2006; Skarmeas and Robson 2008). For each of the companies surveyed, a questionnaire was mailed directly to a targeted key informant, who was deemed to be competent and knowledgeable about the issue of tacit knowledge acquisition during his or her company's business partnerships with international clients. Since tacit knowledge acquisition was measured based on the learning of various tacit elements and know-how, such as manufacturing processes, managerial techniques, marketing skills and product development, it was decided that the best approach would be to choose CEOs and presidents, as well as engineers, managers and executives in areas like production, operations, marketing, R&D, procurement and general management.

The CEOs and presidents were included as key informants because they are normally the decision makers for supplier firms and knowledgeable about their firms' overall business activities. On the other hand, the key informants among the managers, engineers and

executives were chosen as they were believed to have participated in various direct interactions with their international clients, such as problem-solving, face-to-face meetings or technical training. Another critical reason for selecting the above-mentioned key informants as targeted respondents was due to the perception that they possibly have knowledge and direct experience of dealing with international buyers in business relationships. However, if the managers or engineers who initially received the survey felt they were unfit to be the respondents, they were requested to pass the survey on to someone with a better grasp and experience of doing business with the international buyers. Once the surveys were in the right hands, the respondents were asked to base their responses on the perspective of their companies and report their observations and reflections regarding the specific topic at hand.

3.4 Data Collection

The data were gathered through structured questionnaires, mostly of them were mailed to the identified respondents, although a few were delivered by hand through personal contacts. The use of personal contacts was of great help as they were also asked to collect the completed questionnaires from the informants. The personal contacts were all working at the management level in companies short-listed in the final sample. Therefore, they were able to identify suitable respondents for the study and had access to them. Later, it was easy for them to follow-up with these respondents and attempt to collect the completed questionnaires. On top of the intensive mail strategy, the use of personal contacts was indeed an economic alternative that gave quick and promising results.

3.4.1 The mailing package

The mailed survey package was prepared and arranged in a comprehensive manner, aimed at being conducive to achieving a higher response rate. After a few adjustments, the package was dispatched nationwide. The final survey package comprised the following items:

1. A cover letter written on the University of Manchester letter-head, highlighting the following details:
    - the importance and main objective of the study
    - an explanation of tacit knowledge
    - a description of the best person to answer the survey
    - an assurance of confidentiality
    - a promise to share a summary of the results with the company
    - a statement of gratitude
    - the questionnaire
2. The questionnaire was six pages long and printed on A4 paper.
3. A pre-addressed postage-paid envelope to be returned directly to the researcher's address at Business College, Universiti Utara Malaysia.
4. Lucky draw return slip

    A lucky draw slip was included at the end of the questionnaire to encourage participation and to reward respondents who had successfully completed and returned the questionnaire on time. Seven prizes were offered, with winners drawn at random – two lucky winners were drawn to receive the grand prize of Nike

Manchester United jerseys and another five to receive Starbucks gift certificates worth RM 30, equivalent to 6 pounds.

3.4.2 Survey administrative strategy

The mail survey packages were first mailed out to 535 respondents on 18 July 2008 and a deadline of 20 of August 2008 was given for the return of the survey. A long period was given to the respondents because the majority of the companies were situated quite far from the researcher's location. Most were scattered in the central and southern part of Malaysia, such as in Kuala Lumpur, Selangor, Negeri Sembilan and Johor, while the researcher was based in northern Malaysia. Normally, it will take five to seven days for regular mail from the north to reach central or southern area. Thus, even if all went well, it could take at least 10-14 days for the survey to be returned.

On 18 August 2008, a letter and the same questionnaire were dispatched again to all respondents. This time, the letter specified a new deadline of 20 September 2008. The letter thanked the respondents in advance for their prompt responses, but its main intention was to remind them to return the survey. The new deadline was set to give those who had not yet responded a further opportunity to do so. It was felt that this was reasonable given that some of the managers could have been away from the office during the initial period, while others may have been busy and in need of an extension.

3.5 Questionnaire Design

This section illustrates the process used to develop the questionnaire. Prior to the identification of specific questionnaire items, an extensive review was carried out of various areas of the literature on general knowledge, tacit knowledge, knowledge acquisition and transfer, buyer-supplier relationships and firm performance. From this procedure, significant constructs singled out for further in-depth investigation. All these processes would later be of great help in the justification of the issues under investigation. Generally, not many empirical studies had been published on tacit knowledge acquisition in buyer-supplier or international outsourcing relationships. Therefore, the search parameters were extended to other closely-related areas, such as knowledge transfer, knowledge sharing and knowledge conversion. These subject matters were commonly explored in the context of international joint ventures, and discussions of them could also be found in the broader international business strategy literature, such as international strategic alliances and other international business-to-business relationships.

The review paved the way for deciding which constructs were most related to tacit knowledge acquisition in international outsourcing relationships. Once all constructs had been set, the questionnaire items were developed, which the majority of them were based on existing and tested scales from previous studies. Only some of the items from the interactive involvement construct were newly-developed by referring to some of the literature on organizational learning (Inkpen and Dinur 1998; Lane et al. 2001; Oyeleran-Oyeyinka 2004). After all the questionnaire items had been selected, they were

adjusted to suit the context of this study. However, only necessary adaptations were made, so as to maintain the originality of the scales and reduce unnecessary modifications, particularly for those scales that had shown excellent validity and reliability in previous research. When the scales were deemed satisfactory, a seven-choice Likert scale was used to gauge the acquisition of tacit knowledge in the international outsourcing relationship. Almost all the constructs were measured through a response format of “strongly disagree” (1) to “strongly agree” (7).

3.5.1 English language questionnaire

The first and official language of Malaysia is Malay, formally known as Bahasa Malaysia, while English is recognized as the second language. However, as the middle class has expanded and the country’s economic policy has been geared towards a new knowledge economy, global business, science and technology, English has increasingly gained in value and commercial importance. For many years, the language has been widely spoken in social and formal events, especially when it comes to business transactions and communications. In all schools, English is a compulsory subject to be taught and all Malaysian schoolchildren are required to learn English from the age of 7. The learning process continues until they reach university level. Starting in 2003 until end of 2011, the government had taken a proactive approach to enhance English proficiency among Malaysian students, by making it mandatory that the teaching of science and mathematics, at both secondary and primary levels, should be conducted in English.

It makes sense that in the specific context of a business relationship between two international players, who have to manage interaction and learning during their transactions, English is the most important medium of communication. To deal with this, the managers involved in international business projects normally have good English language skills. In fact, most are university or college graduates with at least a diploma. Furthermore, one of the crucial requirements for student admission to Malaysian universities is to have passed the English language element of the Malaysian Certificate of Education exam, which is taken by all schoolchildren during the final year of secondary school. The university students must have obtained at least a satisfactory level (band 3) in the Malaysian University English Test (MUET). Thus, without doubt most Malaysians can write, converse in and comprehend English quite well. With this in mind, the questionnaire was prepared in the English language only.

3.6 Scale Development

The purpose of this section is to describe the development of the research instruments. Most of the items were adapted and some were modified from several related studies. A number of new items were developed for the interactive involvement construct based on several literatures, and tailored to fit this particular study. The experts, who helped to validate the questionnaire, and who provided comments on its entire contents, were asked to pay close attention to these newly developed items.

3.6.1 Absorptive capacity

The concept of absorptive capacity has received a significant amount of research attention since it was first introduced by Cohen and Levinthal (1990) in their seminal work. Since then, many studies have associated absorptive capacity with organizational learning (Eriksson and Chetty 2003; Kim and Inkpen 2005; Lane et al. 2001; Zahra and Hayton 2008), knowledge transfer (Lane and Lubatkin 1998; Mowery et al. 1996; Ouyang 2008; Szulanski 1996; Tsai 2001; Van Wijk et al. 2007) and knowledge acquisition (Lane et al. 2001; Lyles and Salk 1996; Thuc Anh et al. 2006). Most of these studies were inspired by the seminal contribution of Cohen and Levinthal (1990, p.128), who define a firm's absorptive capacity as 'an ability to recognize the value of new information, assimilate it and apply it to commercial ends'. This definition emphasizes that a firm aiming to become a competitive player in its industry must possess an appropriate level of absorptive capacity in order to digest and exploit what it learns from external sources such as business partners or even end customers. However, before it can do this, it must have the ability to recognize the new external knowledge, absorb it and turn it into a commercial purpose.

In their well-known, award winning article on a study of knowledge acquisition in the Hungarian IJVs, Lyles and Salk (1996) rephrase absorptive capacity as the 'capacity to learn'. Based on organizational and management approaches, they coin three important components that build up the learning capacity dimension - current capabilities, flexibility and creativity. Lane et al. (2001) and Thuc Anh et al. (2006) apply Cohen and Levinthal's (1990) concept of absorptive capacity in their study on interorganizational

learning. Extending the work of Lyles and Salk (1996), they empirically test an absorptive capacity model of IJV learning and performance, which incorporates three components: the ability to understand external knowledge, to assimilate external knowledge and to apply external knowledge. While most of the above-mentioned studies focus on the learning and acquisition of explicit knowledge, this study specifically associates the concept of absorptive capacity with the acquisition of tacit knowledge. Since it looks at a different type of knowledge, it adopts slightly different components of absorptive capacity. Based on the empirical researches of several authors (Lane and Lubatkin 1998; Liao et al. 2007; Merchant and Schendel 2000; Minbaeva et al. 2003; Thuc Anh et al. 2006), three important criteria within organizational absorptive capacity that fit the perspective of tacit knowledge acquisition have been identified: prior knowledge, business relatedness and interactive involvement.

3.6.1.1 Prior related knowledge

Cohen and Levinthal (1990) specify prior knowledge as an antecedent of absorptive capacity. They argue that prior knowledge is important when a firm is evaluating and applying new external knowledge. They go on to say that in order for a firm to recognize, assimilate and commercialize new knowledge from external sources, some part of this new knowledge must be at least related to the firm's prior knowledge. Likewise, Lane and Lubatkin (1998) argue that prior knowledge is significant to a firm's ability to understand and value the new knowledge gained. In addition, common prior knowledge within an organization can facilitate the learning of new knowledge, particularly tacit knowledge (Nonaka and Takeuchi 1996). The rationale behind these

arguments is that an individual will learn more efficiently if the new knowledge being acquired is related to what he already knows (Lane et al. 2001). As highlighted by Cohen and Levinthal (1990), both human and organizational features are important elements of organizational absorptive capacity. Following this argument, Minbaeve et al. (2003) point out that a firm's absorptive capacity is built on its employees' competencies. They argue that employees' prior knowledge is one of the critical factors for a firm to fully absorb and exploit new external knowledge. More specifically, Cohen and Levinthal (1990) describe prior knowledge as comprising different types of related knowledge domains, basic skills and problem-solving methods, prior learning experience and learning skills and, finally a shared language. Similarly, Minbaeva et al. (2003) summarize the term prior related knowledge as the employee's educational background and job-related skills. On the other hand, Kim (2001) simply defines prior knowledge as 'existing individual units of knowledge available within the organization'.

In their studies on organizational learning, Minbaeva et al. (2003) and Liao et al. (2007) basically acknowledge a firm's prior knowledge as its employees' ability to learn. Additionally, Thuc Anh et al. (2006) identify employees' ability to learn as an important component of a firm's absorptive capacity. Therefore, in the context of this study, prior related knowledge is defined as the employee's basic knowledge and skills, potential and ability to understand and value new external knowledge (Lane and Lubatkin 1998; Minbaeva et al. 2003). In line with this definition, prior related knowledge is measured using measurement items previously used by Liao et al. (2007) in their empirical work on knowledge sharing, absorptive capacity and innovation in Taiwan's knowledge-

intensive industries. The suppliers were asked to estimate the degree to which they agreed with various statements regarding their employees' ability to learn new knowledge from their foreign buyers on a seven-point scale (1 = strongly disagree, 7 = strongly agree). The measures of the variables are all summarized in Table 3.1.

Table 3.1 Measurement Items for Prior Related Knowledge

Item	Original Version	Adapted/Modified Version	Adapted From
PRI1	Our company staff is equipped with excellent professional knowledge	Our company staff are equipped with excellent professional knowledge	Liao et al. (2007) Alpha 0.74
PRI2	Our company staff can acquire quickly and thoroughly new knowledge required by the work	Our company staff can acquire quickly and thoroughly new knowledge required by the work they do	Liao et al. (2007)
PRI3	Our company staff has better working skills than the staff of our competitors	Our company staff have good working skills	Liao et al. (2007)
PRI4	Our company staff has higher educational qualifications than the staff of our competitors	Our company staff have high educational qualifications	Liao et al. (2007)
PRI5	Our company staff has the ability to use and organize the acquired knowledge	Our company staff are able to understand and organize the acquired tacit knowledge	Liao et al.(2007)

3.6.1.2 Business relatedness

As pointed out by Hanvanich et al. (2005), the issue of relatedness has gained attention from the strategy perspective. In organizational learning research, several researchers (Lane and Lubatkin 1998; Lane et al. 2001; Thuc Anh et al. 2006) have identified relatedness as an important variable in organizational absorptive capacity, as it helps a firm to explore and exploit knowledge (Hanvanich et al. 2005). Thuc Anh et al. (2006) contend that business relatedness provides a firm with prior knowledge about the industry, products and customers. Similarly, Lane et al. (2001) suggest that a firm will learn better from its partner if the two firms have compatible norms and values, as well as similar operations. This shows that a supplier will have a greater ability to learn if it has a similar business orientation to that of its foreign buyer.

In their research on R&D in joint ventures, Richards and De Carolis (2003, p.8) refer to business relatedness as 'the extent to which the parent companies in a joint venture are in a similar businesses'. Applying this definition to international outsourcing research, the present study defines business relatedness as the extent to which suppliers and their foreign buyers are engaged in similar in businesses. If a supplier and its foreign buyer work in similar businesses, they will be familiar with each other's business environments. Cohen and Levinthal (1990) argue that prior experience and knowledge familiarity will increase a firm's level of knowledge acquisition from its partner. As a result, knowledge misappropriation can be reduced (Richards and De Carolis 2003) because the supplier and its foreign partner readily understand each other due to commonalities and familiarity they both share.

The items for business relatedness, as measured by the degree to which the supplier's business is related or similar to that of its foreign buyer, are adapted from items in Lyles et al. (2000) and Thuc Anh et al. (2006). For the purpose of this study, business relatedness indicates the similarity between the supplier's and the foreign buyer's technology, products, industry, customers and skill base. An additional item is taken from Merchant and Schendel (2000) to include the market perspective. All of these items are measured on a seven-point scale (1 = strongly disagree, 7 = strongly agree). The scales for business relatedness are shown in Table 3.2.

Table 3.2 Measurement Items for Business Relatedness

Item	Original Version	Adapted Version	Adapted From
REL1	Our technology was highly related to that of the partner(s)	Our technology is related to that of our foreign buyer	Lyles et al. (2000), alpha 0.83; Thuc Anh et al. (2006), alpha 0.81
REL2	Our products were highly related to that of the partner(s).	Our product is related to that of our foreign buyer	Lyles et al. (2000); Thuc Anh et al. (2006)
REL3	Our industry was highly related to that of the partner(s)	Our industry is related to that of our foreign buyer	Lyles et al. (2000); Thuc Anh et al. (2006)
REL4	Our customers were highly related to that of the partner(s)	Our customers are related to that of our foreign buyer	Lyles et al. (2000); Thuc Anh et al. (2006)
REL5	Our skill base was very similar to that of the partner(s)	Our skill base is related to that of our foreign buyer	Lyles et al. (2000); Thuc Anh et al. (2006)
REL6	Our markets were highly related to that of the partner(s)	Our market is related to that of our foreign buyer	Merchant and Schendel (2000), alpha 0.94; (Koh and Venkatraman 1991)

3.6.1.3 Interactive involvement

In their study on the acquisition of tacit knowledge in China, Yin and Bao (2006) firmly assert that an appropriate method is needed to determine the effectiveness of knowledge acquisition. Modi and Mabert (2007) note that tacit knowledge can be transferred or acquired through organizational routines, in which a firm groups its employees together and transfers the knowledge within the circle of employees. As a result, various activities can be performed to facilitate the flow of this knowledge. This method integrates direct contact and interaction between individuals into the knowledge acquisition process (Modi and Mabert 2007).

For the purpose of this study, interactive involvement reflects the knowledge acquisition methods employed by a supplier or that are accessible to a supplier in its effort to gain tacit knowledge from the foreign buyer. It involves the implementation of learning activities and participation between the supplier and its foreign buyer (Modi and Mabert 2007), which lead to the supplier's acquisition of tacit knowledge. It measures the extent to which a supplier engages in learning activities with its foreign buyer. Learning activities such as site visits (Modi and Mabert 2007), on-the-job training (Oyeleran-Oyeyinka 2004) or technology sharing (Inkpen and Dinur 1998), are expected to serve as a medium through which a supplier to acquire tacit knowledge from its foreign buyer. In total, eight items are used to measure interactive involvement. Three items are adapted from Modi and Mabert (2007), who focus on operational knowledge transfer activities and the supplier's efforts to improve its performance. The remaining five items were

developed based on previous studies (Inkpen and Dinur 1998; Lane et al. 2001; Oyeleran-Oyeyinka 2004), which highlight the importance of effective and interactive methods of knowledge acquisition and transfer. The measurement items for interactive involvement are displayed in Table 3.3.

Table 3.3 Measurement Items for Interactive Involvement

Item	Original Version	Adapted Version	Adapted From
INV1	Invited supplier's personnel to your site to increase their awareness of how their product is used	We conduct on-site visits and tours to our foreign buyer's facility to increase our awareness on how their product is produced and used	Modi and Mabert (2007), alpha 0.648
INV2	Conducted training and educational programs for supplier personnel	Our foreign buyer provides us with trainings and educational programs	Modi and Mabert (2007)
INV3	Self-developed	Our foreign client provides us with performance feedback	Inkpen and Dinur (1998)
INV4	Used site visits by your organization's personnel to this supplier's premises to help them improve performance	Our foreign buyer visits our facility to help us improve our performance	Modi and Mabert (2007)
INV5	Self-developed	Our managers and foreign buyer's managers work together at our facility	Inkpen and Dinur (1998)
INV6	Self-developed	Our foreign client and we conduct structured meetings from time to time	Inkpen and Dinur (1998)
INV7	Self-developed	Our foreign buyer and we engage in problem solving	Inkpen and Dinur (1998)
INV8	Self-developed	Our foreign buyer and we engage in technology sharing	Inkpen and Dinur (1998)

3.6.2 Relational capital

3.6.2.1 Trust

The construct of trust has received considerable attention from researchers as a result of its impact on business relationships (Aulakh et al. 1996; Morgan and Hunt 1994) and learning processes between business partners (Inkpen 1998; Spekman et al. 2002). In addition, it has also received a considerable amount of interest in the context of the buyer-supplier relationship (Doney and Cannon 1997; Dyer and Chu 2003; Jap 1999). Given its relevance to a variety of areas of the literature, it has been defined and measured in various ways to suit different premises. Authors such as Ganesan (1994), Kumar et al. (1995) and Doney and Cannon (1997) define and measure trust from the perspective of perceived credibility and benevolence of an exchange partner.

On the other hand, Moorman et al. (1992) and Morgan and Hunt (1994) highlight confidence and reliability in the conception of trust. Doney and Cannon (1997) examined the implications of trust in buyer-supplier relationships. Given its relevance to the context of this study, trust is defined here based on that study as the degree to which partners perceive each other as credible and benevolent (Doney and Cannon 1997). The construction of the trust scale for this study is also built around Doney and Cannon's (1997) eight items. Following their lead, two components of trust are defined as follows:

- credibility – an expectation that both the supplier and its foreign buyer are reliable.
- benevolence – the extent to which both the supplier and its foreign buyer are concerned with each other's welfare and interests.

The individual questionnaire items for trust in international buyer-supplier relationships are shown in Table 3.4. The respondents are required to assess the trust in the relationship between their own firm and the foreign buyer on a seven-point scale, anchored by strongly disagree (1) and strongly agree (7). Trust is judged from the supplier's standpoint, but they must observe their own, as well as their foreign buyer's trustworthiness, in the context of their business relationship.

Table 3.4 Measurement Items for Trust

Item	Original Version	Adapted Version	Adapted From
TRU1	This supplier keeps promises it makes to our firm	In this business relationship, we keep promises we make to each other	Donney and Cannon (1997), alpha 0.94.
TRU2	This supplier is not always honest with us	Both parties are always honest with each other	Donney and Cannon (1997)
TRU3	We believe the information that this vendor provides us	Each party believes the information provided by each other	Donney and Cannon (1997)
TRU4	This supplier is genuinely concerned that our business succeeds	Both parties are genuinely concerned that the other's business succeeds	Donney and Cannon (1997)
TRU5	When making important decisions, this supplier considers our welfare as well as its own	When making important decisions, both parties consider each other's welfare as well as their own	Donney and Cannon (1997)
TRU6	We trust this vendor keeps our best interests in mind	We trust both parties keep each other's best interests in mind	Donney and Cannon (1997)
TRU7	This supplier is trustworthy	We both find each other trustworthy	Donney and Cannon (1997)
TRU8	We find it necessary to be cautious with this supplier	There is no reason for both parties to be suspicious of one another	Donney and Cannon (1997)

3.6.2.2. Interaction

Larson (1992) and Nahapiet and Goshal (1998) look at interaction from the social aspect. They define interaction in the context of social relationships between the firm and the customer. Corresponding to this definition, in their study about the effect of social capital on knowledge acquisition and exploitation, Yli-Renko et al. (2001) indicate that once the interaction between partners increases, other factors, such as the intensity, frequency and breadth of information exchanged, will increase too. Consistent with the definitions and arguments of these authors, interaction in the present study is described as behavioral actions and social relationships between a supplier and its foreign buyer. Accordingly then, the measurement of interaction involves information exchange, joint activities and socialization between the partners.

Measurement scales for interaction between the supplier and the foreign buyer are adapted from Paulraj and Chen's (2005) measurement of the communication construct. In their study on strategic supply management in the buyer-supplier relationship, they investigate how strategic supply management fosters buyer-supplier communication and long-term relationships. They measure communication based on the extent to which a firm and its supplier share and exchange critical information and maintain face-to-face meetings. The communication items used in their study are reasonably relevant to the interaction construct applied in the present study because they are applicable to the definition and measurement of partner interaction, which stresses information exchange and joint activities between the supplier and the foreign buyer.

As well as the six items adapted from Paulraj and Chen (2005), another two additional items are taken from Yli-Renko et al. (2001) to measure the socialization aspect between a supplier and a foreign buyer. The measurement items for interaction are reported in Table 3.5. On a seven-point scale (1 = strongly disagree, 7 = strongly agree), the respondents are asked to estimate the degree to which they agree or disagree with the various scale items concerning the two-way interaction that goes on in their firm's business relationship with its foreign buyer.

Table 3.5 Measurement Items for Interaction

Item	Original Version	Adapted Version	Adapted From
INT1	We share sensitive information (financial, production, design, research and/or competition)	We share sensitive information (financial, production, design, research or competition)	Paulraj and Chen (2005), alpha 0.87
INT2	Suppliers are provided with any information that might help them	We provide any information or new developments that might help each other	Paulraj and Chen (2005)
INT3	Exchange of information takes place frequently, informally and/or in a timely manner	We exchange information frequently, informally or in a timely manner	Paulraj and Chen (2005)
INT4	We keep each other informed about events or changes that may affect the other party	We keep each other informed about events or changes that may affect the other party	Paulraj and Chen (2005)
INT5	We have frequent face-to-face planning and communication	We have frequent face-to-face planning and communication	Paulraj and Chen (2005)
INT6	We exchange performance feedback	We exchange performance feedback	Paulraj and Chen (2005)
INT7	We maintain close social relationships with this customer	We maintain close social relationships with our foreign buyer	Yli-Renko et al. (2001) alpha 0.71
INT8	We know this customer's people on a personal level	We know our foreign buyer's people on a personal level	Yli-Renko et al. (2001)

3.6.2.3 Cultural sensitivity

Previous researchers have emphasized the importance of sensitivity pertaining to business culture in cross-border business relationships (Johnson et al. 1996; LaBahn and Harich 1997; Skarmeas et al. 2002; Skarmeas and Robson 2008). It has been argued that a firm, which is insensitive to its foreign partner's business culture, will struggle to gain its partner's trust, commitment and satisfaction (Skarmeas and Robson 2008). On the other hand, communication can be increased and conflict minimized if the firm is aware of the cross-cultural differences and is willing to adapt to its foreign partner's national business practices (LaBahn and Harich 1997). As a result, two-way trust will develop between cross-cultural partners (Johnson et al. 1996) and the relationship quality (Skarmeas and Robson 2008) and performance (Skarmeas et al. 2002) will eventually improve as well.

Based on the definitions by Johnson et al. (1996) and LaBahn and Harich (1997), this study defines cultural sensitivity as a supplier's awareness of the differences between its own and its foreign buyer's business cultures and its ability to approach, adapt to and manage these differences. It is operationalized through four items on a seven-point scale (1 = strongly disagree, 7 = strongly agree). The items are intended to measure a supplier's awareness of its foreign buyer's business culture and its efforts to adapt to the buyer's way of doing business. These items were modified from LaBahn and Harich's (1997) study, which investigates sensitivity to business culture among American manufacturers and their Mexican distributors. The survey items used for cultural sensitivity can be viewed in Table 3.6.

Table 3.6 Measurement Items for Cultural Sensitivity

Item	Original Version	Adapted Version	Adapted From
CUL1	This manufacturer understands how distributors and manufacturers conduct business in Mexico	We understand how buyers and suppliers conduct business in our foreign buyer's country	LaBahn and Harich – alpha 0.89 (1997)
CUL2	This manufacturer is willing to adapt to the Mexican way of doing business	We are willing to adapt to the way our foreign buyer conducts business	LaBahn and Harich (1997)
CUL3	This manufacturer is sensitive to the difficulties we encounter when doing business with U.S. companies	We are sensitive to the difficulties our foreign buyer encounters when doing business with Malaysian suppliers	LaBahn and Harich (1997)
CUL4	This manufacturer is aware of how we conduct business inside Mexico	We are aware of how our foreign buyer conducts business inside its own country	LaBahn and Harich (1997)

3.6.3 Tacit knowledge acquisition

Polanyi's (1966) explanation of tacit knowledge is often cited in various studies (Collins and Hitt 2006; Inkpen 2002; Inkpen and Pien 2006). Kim (1998) describes tacit knowledge as the knowledge that resides in the human mind and body, but which is difficult to codify and communicate and which can only be demonstrated through action, commitment and involvement. Following this, tacit knowledge acquisition is defined in this study as a process that a supplier obtains knowledge from its foreign buyer, which is unarticulated (Polanyi 1966), non-codified (Howells 1996) and can only be learned through work experience (Cavusgil et al. 2003; Lam 2000; Marianna and Kalotina 2007). A supplier's employees are able to gain this experience, which involves observation, imitation and practice (Kim 1997), when they interact or work side by side with the foreign buyer's employees (Lam 2000).

Consistent with the arguments put forth by several organizational learning researchers (Dhanaraj et al. 2004; Lane et al. 2001; Shenkar 2001; Zander and Kogut 1995), knowledge of foreign cultures, managerial and marketing expertise all have more tacit components than product development, production and technology. Therefore, in their study on tacit and explicit knowledge transfer in IJVs, Dhanaraj et al. (2004) categorize the former group as tacit knowledge, and written technical knowledge, written management knowledge and procedural or technical manuals as explicit knowledge. Using similar logic, Thuc Anh et al. (2006) categorize knowledge about marketing, management, cultures and tastes, as tacit knowledge. On the other hand, they group technological expertise, manufacturing processes and product development know-how into the explicit knowledge category.

Unlike Dhanaraj et al. (2004) and Thuc Anh et al. (2006), who separate tacit knowledge from explicit knowledge, this study is built on the contention that all types of knowledge contain tacit components (Yin and Bao 2006). Thus, tacit knowledge acquisition is measured based on the amount of tacit knowledge acquired by a supplier from its foreign buyer. For this reason, the tacit knowledge acquisition construct utilizes all six items developed by Lyles and Salk (1996), who explored the factors that influence the knowledge acquisition process between Hungarian IJVs and their foreign parents. These items were also used by Yin and Bao (2006) in their study of the consequences of supplier-side individual level factors and recipient-side factors on tacit knowledge acquisition by Chinese firms through IJVs. The measurement scales for tacit knowledge

acquisition are presented in Table 3.7. They measure the suppliers' evaluations of the amount of tacit knowledge they acquire from their foreign buyers on a seven-point scale (1 = little, 7 = large amount).

Table 3.7 Measurement Items for Tacit Knowledge Acquisition

Item	Original Version	Adapted Version	Adapted From
TAC1	We have learned a great deal of technological expertise from the partner(s).	We have learned about the technological expertise from our foreign buyer.	Lyles and Salk (1996) alpha 0.88; Tsang et al., (2004) alpha 0.91; Yin and Bao (2006); alpha 0.87
TAC2	We have learned a great deal of manufacturing processes from the partner(s).	We have learned about the manufacturing processes from our foreign buyer	Lyles and Salk (1996); Tsang et al., (2004); Yin and Bao (2006)
TAC3	We have learned a great deal of new knowledge about product development expertise from the partner(s).	We have learned about the product development expertise from our foreign buyer	Lyles and Salk (1996), Tsang et al., (2004); Yin and Bao (2006)
TAC4	We have learned a great deal of marketing expertise from the partner(s).	We have learned about the marketing expertise from our foreign buyer	Lyles and Salk (1996), Tsang et al., (2004); Yin and Bao (2006)
TAC5	We have learned a great deal of new knowledge about foreign culture and tastes from the partner(s).	We have learned about the foreign culture and tastes from our foreign buyer	Lyles and Salk (1996), Tsang et al., (2004)
TAC6	We have learned a great deal of managerial techniques from the partner(s).	We have learned about the managerial techniques from our foreign buyer	Lyles and Salk (1996), Tsang et al., (2004); Yin and Bao (2006)

3.6.4 Capability Enhancement

In relation to Grant (1996a) and Teece et al. (1997), a firm's capability enhancement is defined as the ability to effectively integrate internal and external knowledge and competencies in order that a firm may grow and survive, as well as keep pace with a changing business environment. Les Tien-Shang and Sukoco (2007) indicate that a firm's capability can be improved if it invests its effort, time and money in product and process innovation. In addition, they argue that if a firm continually upgrades its competency, then efficiency can be maintained. In fact, in their study on knowledge management and organizational effectiveness in Taiwanese firms, they show that a firm's competency improvement has a positive impact on its organizational effectiveness.

The items for capability enhancement, as measured by the supplier's ability to improve its organizational efficiency and conceive new ways to create value (Collis 1994), are adapted versions of Les Tien-Shang and Sukoco's (2007) items. Those authors in turn modified the scales developed by Gold et al. (2001), which were utilized to measure organizational effectiveness. Gold et al. (2001) look at the concept of knowledge management from the perspective of organizational capabilities. However, the advantage of the items developed by Les Tien-Shang and Sukoco (2007) is that, in addition to making some adjustments to the original measurement scales, they added some financial items. The measurement items are used in this study to assess respondents' judgment of the degree to which their firms' capabilities are enhanced through their business

relationships with the foreign buyers. The items are measured on a seven-point scale (1 strongly disagree, 7 = strongly agree). Table 3.8 provides details of the measures used to access the capability enhancement construct.

Table 3.8 Measurement Items for Capability Enhancement

Item	Original Version	Adapted Version	Adapted From
CAP1	In the past two years, our company has improved its ability to anticipate potential market opportunities for new products/services	Our company has improved its capability to anticipate potential market opportunities for new products	Gold et al. (2001); Lee and Sukoco (2007) alpha 0.973
CAP2	In the past two years, our company has improved its ability to rapidly commercialize new innovations	Our company has improved its capability to rapidly commercialize new innovations	Gold et al. (2001); Lee and Sukoco (2007)
CAP3	In the past two years our company has improved its ability to anticipate surprises and crises	Our company has improved its capability to anticipate surprises and crises	Gold et al. (2001); Lee and Sukoco (2007)
CAP4	In the past two years our company has improved its ability to quickly adapt its goals and objectives to industry/market changes	Our company has improved its capability to quickly adapt its goals and objectives to industry changes	Gold et al. (2001); Lee and Sukoco (2007)
CAP5	In the past two years our company has improved its ability to decrease market response times	Our company has improved its capability to decrease market response times	Gold et al. (2001); Lee and Sukoco (2007)
CAP6	In the past two years, our company has improved its ability to be responsive to new market demands	Our company has improved its capability to be responsive to new market demands	Gold et al. (2001); Lee and Sukoco (2007)
CAP7	In the past two years, our company has improved its ability to streamline its internal processes	Our company has improved its capability to streamline its internal processes	Gold et al. (2001); Lee and Sukoco (2007)

3.6.5 Opportunity Recognition

Opportunity recognition is proposed in this study to refer to the outcome of the Malaysian manufacturing supplier's tacit knowledge acquisition, capability enhancement and relational capital developed during its outsourcing relationship with a foreign buyer. In line with this explanation, the local supplier is expected to discover business opportunities as a result of an increase in its tacit knowledge stock, which is obtained from the foreign outsourcing client, and the enhancement of its capabilities. In terms of definition, Lumpkin and Lichtenstein (2005, p.457) describe opportunity recognition as 'the ability to identify a good idea and transform it into a business concept that adds value and generates revenue'. This description is also applied by Corbett (2007) in his empirical study on learning and entrepreneurial opportunities. Following Lumpkin and Lichtenstein's (2005) definition, opportunity recognition is defined in this study as the discovery of a route for the creation of potential new businesses and possibilities for enhancing its business position and profits. To compete with other global suppliers, particularly the dramatic progress made by Chinese suppliers, it appears that Malaysian suppliers urgently need to search for potential new business opportunities and penetrate larger networks, which they can develop through relationships with foreign buyers. To a great extent, a collaborative relationship can only be used as a basis to obtain new technologies and markets if the foreign buyer is satisfied with the current business relationship and the supplier's performance of the outsourcing project.

The measure of opportunity recognition in this study captures the extent to which a supplier identifies potential technological and market opportunities, derived as a result of

performing an outsourcing contract and having a business relationship with its foreign buyer. Market opportunities and technological opportunities (Kirzner 1992, 1997; Andersson et al., 2005) are two types of potential opportunities considered in this study. Technological opportunities include activities such as the creation of new products or services, the discovery of new materials, the development of new methods of production and the identification of new ways of organizing (Kirzner 1997). Conversely, market opportunities are associated with locating new geographical markets. Schumpeter (1934) identifies these five activities as instruments of change, which a firm can make use in its quest for a higher profits and competitive position.

Most of the empirical studies (Singh et al., 1999; Shepherd and DeTienne, 2005; Corbett, 2002, 2007) on opportunity recognition measure this construct by the quantity of opportunities identified. Since opportunity recognition in this study is approached from the perspective of identifying an idea that could improve a firm's performance, the measurement scales are based on nine of the twenty-four items developed by Pahlberg and Thilenius (2005). They make use of all five sources of change, mentioned above, to examine the continuous opportunity development process in ongoing customer-supplier business relationships. The remaining items from Pahlberg and Thilenius's (2005) study are not included here as nine of them are from the buyer's standpoint, while the remaining six are intended to measure the influence of vertical and horizontal connections in such relationships. All measurement items for the opportunity construct are listed in Table 3.9. Based on a seven-point scale, the items are anchored by strongly disagree and strongly agree.

Table 3.9 Measurement Items for Opportunity Recognition

Item	Original Version	Adapted Version	Adapted From
OPP1	Customer is important concerning information about market activities.	Our foreign buyer is important to us concerning market activities	Pahlberg and Thilenius (2005)
OPP2	Customer is important concerning information about new, important business contacts	Our foreign buyer is important to us concerning information about new and important business contacts	Pahlberg and Thilenius (2005)
OPP3	Customer is important concerning product development	Our foreign buyer is important to us concerning product development	Pahlberg and Thilenius (2005)
OPP4	Customer has caused adaptation for the supplier concerning product technology	Our foreign buyer has caused us an adaptation concerning product technology	Pahlberg and Thilenius (2005)
OPP5	Customer is important concerning production development	Our foreign buyer is important to us concerning production development	Pahlberg and Thilenius (2005)
OPP6	Customer has caused adaptation by the supplier concerning production technology	Our foreign buyer has caused us an adaptation concerning production technology	Pahlberg and Thilenius (2005)
OPP7	Customer is important concerning technological information	Our foreign buyer is important to us concerning technological information	Pahlberg and Thilenius (2005)
OPP8	Customer has caused adaptation by the supplier concerning organizational structure	Our foreign buyer has caused us an adaptation concerning organizational structure	Pahlberg and Thilenius (2005)
OPP9	Customer has caused adaptation by the supplier concerning business conduct	Our foreign buyer has caused us an adaptation concerning business conduct	Pahlberg and Thilenius (2005)

3.7 Expert and Academic Reviews

In order to develop an effective questionnaire, practitioners and scholars were asked to review it and provide suggestions and comments on its contents. This stage was important in refining and validating the measurement scales. Two in-depth interviews were conducted face-to-face with experienced managers in the identified Malaysian supplier firms. They were top-level managers directly in-charge of international outsourcing activities for their firms. One was a factory manager for a local company supplying automotive components to a number of foreign buyers from countries such as Norway, Sweden and Korea.

The other was a senior manager from a company producing and selling oleochemical products to local and foreign clients, including firms in the US, Thailand, Singapore and the Philippines. She was involved in many business meetings, briefings and learning sessions with the company's foreign clients. The interviews were arranged to obtain their views and feedback on the final draft of the survey, particularly regarding whether they understood the questions and whether they had difficulties understanding the concept of tacit knowledge. More valuable still was that they were willing to share their experiences regarding each of the constructs highlighted in the research framework and provided comments on the quality of the questionnaire. These interviews therefore facilitated the process of validation, and helped to ensure the reliability of the questions provided in the structured questionnaire.

The final draft of the questionnaire was also given to three academicians, who are experts in the knowledge management area. The draft was emailed to a professor at Indiana University in the USA, another professor at Universiti Putra Malaysia (UPM) and a senior lecturer at the University of Manchester. They all provided valuable input that helped generate a better set of questions. The questionnaire items and contents were further modified on the basis of their feedback. Professor Marjorie Lyles, a prominent scholar in strategic management and knowledge management, is one of these experts. She has carried out a number of studies and published many journal articles on various topics concerning organizational learning and international business strategic partnerships. Many international organizational learning researchers have cited her work, particularly the articles on knowledge acquisition in IJVs. Her most acknowledged journal article entitled 'Knowledge acquisition from foreign parents in international joint ventures: an empirical examination in the Hungarian context', won an award in 2007.

Due to her reputation and credibility, the suggestions she offered were considered the most crucial inputs to the questionnaire development process for this study. For example, she edited the entire contents of the questionnaire, adding more appropriate words to some of the measurement items and omitting those that were confusing or complicated. She also suggested a simpler definition of tacit knowledge and recommended that the definition should be mentioned repeatedly in the questionnaire, whenever necessary, so that the participants could always recall its meaning. The rationale was that, given the complicated nature of tacit knowledge, all participants should be regularly reminded of its characteristics and description. Consequently, she

helped a great deal with improving this study's questionnaire instruments and general contents.

The whole review process resulted in the modification of some of the wording in the questionnaire and revision of its format. In fact, four questions were removed in response to the feedback from the managers. Two questions regarding the interaction constructs were argued by the managers to be irrelevant in international outsourcing relationships. The questions 'we maintain close social relationships with our foreign buyer' and 'we know our foreign buyer's people on a personal level' were originally adapted from a study of Yli-renko et al. (2003). They were added to the existing six measurement items in the interaction construct in order to capture the partners' personal relationship and socialization, considered critical in the acquisition of tacit knowledge. However, given that the supplier and its client are located in different countries, managers from the two sides would only meet to discuss urgent and important business matters. Unlike in IJVs, social interactions and personal bonds are not particularly intense in international outsourcing relationships.

The other two deleted questions were measurement items for the opportunity recognition constructs. The experts highlighted that the questions 'our foreign buyer has caused us an adaptation concerning organizational structure' and 'our foreign buyer has caused us an adaptation concerning business conducts' are less significant in an international buyer-supplier relationship. The reason given was that there are limited situations in such a non-equity business alliances in which suppliers will find it useful to make

changes to organizational structure or business conduct. Moreover, these two elements would not be simply influenced by a foreign buyer alone because they involve the supplier's internal affairs. After removing these four questions, the final survey instrument ended up at six pages long, with 57 questions. Including nine additional demographic questions, there was a total of 66 questions in the complete survey, which was then used in the pilot study.

3.8 Pilot Study

A pilot study was then conducted using the questionnaire to collect data in order to assess the reliability of the measurement items for each construct. This process involved distributing 38 questionnaires at a workshop on ISO 9001:2008, organized by the Malaysian Productivity Corporation (MPC). The participants included managers from various manufacturing companies in the Klang Valley. Only those with experience of dealing with foreign companies were selected for the pilot study. These participants were asked to fill in the questionnaire, identify any confusion or difficulty they had when responding to the questionnaire items and to offer any feedback or suggestions they might have for improving the questionnaire. With the help of the workshop trainer, all 38 questionnaires were completed and collected at the end of the briefing session. In return, all participants received pens with the logo of Universiti Utara Malaysia on them, as a token of appreciation. Next, a reliability test was performed on the data obtained in the pilot, so as to evaluate the internal consistency of the measurement items for each construct.

3.8.1 Reliability test based on pilot study

Reliability is the degree to which a scale will provide stable and consistent result if it used to measure the same things more than once (Malhotra 2006; Salkind 2008). There are several methods that can be applied to assess the reliability of measurement items (Hinkin 1995; O'Leary-Kelly and Vokurka 1998). On the other hand, Mentzer and Flint (Mentzer and Flint 1997) offer four principle approaches to testing reliability: test-retest, split half, internal consistency and inter-judge. Salkind (2003) discuss four methods: test-retest, parallel form, inter-rater and internal consistency reliability. However, the most common measure of reliability utilized in survey research is internal consistency reliability (Field 2005; Hair et al. 2006; Mentzer and Flint 1997). Its main objective is to evaluate how consistently each item represents a given domain of the construct measured (Malhotra 2006; Mentzer and Flint 1997).

Internal consistency reliability of a scale can be assessed to determine whether all the items in the scale measure the same construct (Hair et al. 2006), or whether they are inter-related in terms of their intended constructs (Malhotra and Grover 1998). The most widely used measure of internal consistency reliability is reliability coefficient alpha, the Cronbach's alpha (Craig and Douglas 2005; Flynn et al. 1990; Hinkin 1995; Mentzer and Flint 1997; Salkind 2003). Cronbach's alpha assesses how highly correlated each item in a scale is to the combination of the other items, by computing the average correlation of each item to the other items in the scale (Craig and Douglas 2005; Mentzer and Flint 1997). Cronbach's coeeficient alpha takes values from 0 to 1.

O'Leary-Kelly and Vokurka (1998) emphasize that the higher the value of Cronbach's alpha, the higher is the reliability of the measurement items and the more confidence one can have on them. In some cases, a number of items may be eliminated if they result in low alpha values. In terms of the number of items considered appropriate, Cronbach's alpha requires multi-item scales to have at least three items so that the average correlation of each item to its scale can be computed (Mentzer and Flint 1997). Each construct operationalized in the present study has at least four items. Therefore, there is no impediment to employing Cronbach's alpha to assess the internal consistency reliability in this study. The threshold for acceptability of the internal consistency of the scale, as employed in the present study, is at least 0.70 (Hair et al. 2006; Nunally and Bernstein 1994). As shown in Table 3.10, all Cronbach's alpha values exceed 0.7, which indicates that the measurement items in the questionnaire are reliable.

Table 3.10 Results of Reliability Test (Pilot Study)

Variables	No. of Items	N	Cronbach's Alpha
Absorptive Capacity			
Prior knowledge	5	38	0.810
Business relatedness	6	38	0.877
Interactive involvements	8	38	0.891
Relational Capital			
Trust	8	38	0.934
Interaction	6	38	0.839
Cultural sensitivity	4	38	0.836
Tacit knowledge acquisition	6	38	0.936
Capability enhancement	7	38	0.947
Opportunity recognition	7	38	0.944
Total	**57**		

CHAPTER FOUR

RESULTS AND FINDINGS

4.1 Introduction

This chapter explains the main survey data analyses and the results of the hypothesis testing. It also reports the results of the reliability test, the sample response rate, demographics and descriptive statistics are. The next section examines construct validity and reliability of the final sample data for each of the constructs in the proposed model. The following section presents the results of the statistical analyses, hypothesis testing and the overall model. Descriptive analyses were calculated using SPSS 16.0 and the hypothesis and model testing were done using partial least squares (PLS) version 2.0.

4.2 Reliability Test

The results of the reliability test for each variable and the number of items are shown in Table 4.1. All items are presented in this table, but some were removed due to poor individual factor loadings. The capability enhancement construct had two missing values because a respondent did not answer two of the questions relating to this construct. Therefore, the responses received for this construct were less than 122. However, this did not significantly affect the overall reliability. Generally, the alpha values displayed in Table 4.1 prove that all variables were internally consistent, with Cronbach's alpha values higher than 0.7. In fact, all alpha loadings are above 0.8, which could be considered strong and satisfactory. In summary, these results show that all of the instruments used to measure each construct are reliable.

Table 4.1 Overall Results of Reliability Test (before weak items were removed)

Variables	No. of Items	N	Cronbach's Alpha
Absorptive Capacity			
Prior knowledge	5	122	0.802
Business relatedness	6	122	0.874
Interactive involvement	8	122	0.848
Relational Capital			
Trust	8	122	0.919
Interaction	6	122	0.839
Cultural sensitivity	4	122	0.863
Tacit knowledge acquisition	6	122	0.892
Capability enhancement	7	121	0.914
Opportunity recognition	7	122	0.900
Total	**57**		

4.3 Survey Response Rates

A week before the deadline, a total of 51 responses had been returned. After the deadline expired, 70 of the 535 managers contacted in the initial mailing had returned their questionnaires and another 23 completed questionnaires were collected from personal contacts. Thus, in the first wave, a total of 93 questionnaires were returned. Of these, six replies could not be considered for several reasons: (1) three questionnaires were returned with blank responses, (2) two were lacking most of the independent variable data, and (3) one was returned to sender as a result of the company either moving to a new location or closing down. This left only 87 returned questionnaires that could be included in further analysis. Since the targeted number of completed replies was 200, this initial feedback was considered very poor. Thus, a few days before the first deadline was reached, it was necessary to take proactive action in an attempt to increase the response rate. Therefore, a second mailing of questionnaires was made to all respondents

before the original due date. From the second mailing, a further 39 questionnaires were received, four of which were considered unusable. Two respondents failed to answer more than half of the questions, while one returned one returned an empty survey with a short note stating that his company was currently undergoing corporate restructuring and, therefore, he could not respond to the survey. One honest participant mentioned that her responses were all based on her general judgment and intuition as the company was no longer exporting. Thus the final number of valid complete responses from phase two was 35. In total, the final number of usable questionnaires was only 122, representing a response rate of 22.8 percent. The total numbers of returned and usable questionnaire are shown in Table 4.2.

Table 4.2 Questionnaire Response

Dates/ Deadlines	Returned questionnaires	Unused questionnaires	Usable questionnaires
First wave 20 July 2008 – 20th Aug 2008	93	6	87
Second wave 16th Sept 2008 – 20th Sept 2008	39	4	35
Total	**132**	**10**	**122**

Compared to other knowledge acquisition studies, the response rate of this study could be considered low. The low response rate has been acknowledged as one the biggest challenges facing academic researchers in Malaysia. It is considered a common scenario for business organizational and industry-oriented research in the Malaysian setting. In a study on Malaysian firms and their export programs, Ahmed et al. (2002) cited Leong

(1996) and Ching (1997), both of whom expressed the same opinion that a low response rate is a typical issue in developing countries such as Malaysia. In an article concerning differences in response rates in a cross-country industrial mail survey, Harzing (2000) describes how she mailed out questionnaires for a study about control mechanisms in multinational companies to 22 different countries. She reveals that Southeast Asian countries, including Malaysia, provided among the lowest response rates. Besides Malaysia, its closest neighbors, Singapore and Thailand, also showed similar response pattern. Harzing (2000) highlights cultural and geographical distance as two explanations for the different response rates between countries.

London and Dommyer (1990) claim that non-satisfactory response rates in mail surveys regarding industrial basis continues to be a serious problem for researchers. They identify several factors that could cause this phenomenon. Firstly, there are gatekeepers, such as receptionists, secretaries or personal assistants, who will usually screen letters and calls sent to their bosses. Secondly, the managers are preocupied with their usual routines. Thirdly, companies might be afraid of revealing proprietary information. Lastly, responding to surveys could be against the policy of some companies. All these reasons could be behind the low response rate in this study as well. The attitudes of Malaysian respondents towards mail surveys should also be considered as well as the company standpoint. An upper-level manager from a local automotive supplier in Malaysia once mentioned to the researcher that he could receive as many as two to five mail surveys a month from academics or university students. What is more, the majority of the surveys were focused on the Malaysian manufacturing industry. As he did not

have enough time to answer all of the surveys, he only responded to those with interesting topics that he was most familiar with and were most closely related to his working experience. Other than this, a tempting incentive could also motivate him to return a completed survey.

4.3.1 The evaluation of non-response bias

As detailed in the previous sections, several attempts were made to achieve a high response rate. All respondents were sent a questionnaire package using an envelope with the university logo and granting entry into a lucky draw upon completion of the questionnaire. To maximize the return rate, Dillman's (1978; 2008) recommendations were adopted as follows: personalize the cover letter, include a postage-paid self-addressed envelope, assure confidentiality and develop a questionnaire that is easy to understand and complete. These strategies were applied to get as many responses as possible, which is important to minimize non-response bias. However, regardless of the various efforts, only 132 questionnaires were received and 10 were excluded due to the reasons mentioned earlier. Thus, only 122 responses were available for further analysis, making a response rate of just 22.8 percent. Even though all necessary approaches were taken, the response rate could be considered low and could result in non-response bias.

To evaluate the existence of non-response bias, the time trend extrapolation technique was used, assuming that late respondents would be similar to non-respondents (Amstrong and Overton 1977). Following this line, a comparison was made between the responses provided by 30 early respondents and 30 late respondents to identify whether statistical differences existed between the groups. An independent t-test was conducted

on five descriptive variables taken from the questionnaire, namely annual revenue, total number of employees, industry, duration of partnership and the region in which the buyer was based. As reflected in Table 4.3, the t-test yielded no statistical differences in the mean scores ($p>0.05$) between the early and late respondents. More specifically, no significant differences were found for the variables in question between the responding and non-responding suppliers. The results of this test thus suggest that the issue of non-response bias is not a major concern in this study.

Table 4.3 T-Test Analysis for Non-Response Bias

	N	Mean	P-value
Annual revenues			
Early	30	2.5333	0.855
Late	30	2.4667	
Total employees			
Early	30	2.1667	0.331
Late	30	2.4667	
Industry			
Early	30	2.0667	0.549
Late	30	1.9000	
Partnership duration			
Early	30	1.6667	0.062
Late	30	1.9667	

4.3.2 The evaluation of common method variance

For the purpose of statistical analysis, a self-report and standardized questionnaire from a single source is the only approach used to collect all the data in this research. There is a chance that common method variance, also known as common method bias, may exist if research relies on a survey (Arino 2003), in which the constructs are measured based on

a single method (Doty and Glick 1998), and the measures of the dependent and independent variables are drawn from the same respondent (Zhou et al. 2008). In their article on common method bias in behavioral research, Podsakoff et al. (2003) identify and summarize various potential sources and conditions that could result in common method bias. Since the current study possesses all the above-mentioned criteria, and the data in the current study are collected from a single-respondent from each firm (Podsakoff et al. 2003) and utilized the same questionnaire (Simonin 1999), Harman's single-factor test was employed to detect the existence of common method bias (Podsakoff et al. 2003; Podsakoff and Organ 1986). This technique is based on the idea that a significant amount of common method bias could be observed if the results reveal a single factor, or produce a general factor that accounts for the majority of the variance (Podsakoff and Organ 1986). A principal component factor analysis was performed on all measurement items, and generated 17 factors with eigenvalues greater than 1.0, which accounted for 78.75 percent of the variance. Since several factors emerged and the first factor did not capture most of the variance (only 27.91 percent), it can be concluded that the findings of this study are unlikely to be affected by common method variance.

4.4 Respondent and Company Profiles

4.4.1. Foreign buyers' country of origin

Table 4.4 shows a representative profile of the suppliers' foreign buyers and the distribution of their geographical origins. The US and Japan play typically dominant roles as international business players often the case in manufacturing industries. Other prominent countries are China, Germany, South Korea and the UK. Nearly half of the

local supplier companies in this study have international outsourcing relationships with foreign buyers from the Asian region. As can be seen from Table 4.5, around 46 percent of the outsourcing projects come from buyers in Asian countries, particularly Japan, South Korea and China.

Table 4.4 Foreign Buyer's Country of Origin

No.	Countries	Frequency	No.	Countries	Frequency
1.	South Africa	2	16.	Maldives	1
2.	Australia	3	17.	Mauritius	1
3.	Belgium	1	18.	Norway	1
4.	Brunei	2	19.	New Zealand	2
5.	China	8	20.	Philippines	1
6.	Denmark	1	21.	Singapore	3
7.	Egypt	2	22.	Saudi Arabia	4
8.	Finland	4	23.	Sri Lanka	3
9.	Germany	9	24.	Sweden	2
10.	Holland	2	25.	Syria	1
11.	India	2	26.	Thailand	5
12.	Indonesia	3	27.	UAE	1
13.	Japan	21	28.	UK	10
14.	South Korea	7	29.	USA	18
15.	Kuwait	1	30.	Vietnam	1
	Total	**68**		**Total**	**54**

Table 4.5 Foreign Buyers – by Region

No.	Region	Frequency	Percentage %
1.	Asia	57	46.7
2.	Europe	30	24.6
3.	North America	18	14.8
4.	Middle East	7	5.7
5.	Africa	5	4.1
6.	Oceania	5	4.1
	Total	**122**	**100**

4.4.2 Product category

Table 4.6 shows the categories of products or the range of products outsourced to the Malaysian suppliers. Some of the local suppliers only sell raw materials to their foreign buyers, while others supply components or finished products. In this study's sample, the majority of the suppliers supply only finished products, with only components the next largest segment. Another 26 suppliers sell more than one product category to their foreign clients.

Table 4.6 Categories of Products Supplied to Foreign Buyers

Product Categories	Frequency	Percentage (%)
Raw materials	15	12.3
Components	23	19.7
Subassemblies	6	4.9
Finished products	51	41.8
Raw materials and components	2	1.6
Raw materials and finished products	3	2.5
Components and subassemblies	12	9.0
Components and finished products	4	3.3
Subassemblies and finished products	3	2.5
Raw material, subassemblies & finished products	2	1.6
Components, subassemblies and finished products	1	0.8
Total	**122**	**100**

4.4.3 Duration of outsourcing relationships

All respondents were asked to state how long their company had been working with a particular selected foreign buyer. As shown in Table 4.7, most of the local suppliers had been conducting business with their foreign buyers for 1-10 years, with the majority had 6-10 years of experience.

Table 4.7 Duration of International Outsourcing Relationships

Duration	Number of suppliers	Percentage (%)
1-5	43	35.2
6-10	57	46.7
11-25	22	18.0
Total	**122**	**100**

4.4.4 Supplier company profiles

Table 4.8 summarizes the company profiles of the respondents. The suppliers' annual revenues are reported in the Ringgit Malaysia (RM) currency. The figures demonstrate that almost 65 percent of the suppliers make less than RM 50 million annually. With regards to the total number of employees in the supplier companies, the majority of respondents (69.6 percent) indicated that their company employs less than 500 employees. Only 30.4% of the suppliers had more than 500 people. In addition to these statistics, the diversity of the local suppliers, based on industry, is also shown in Table 4.8. It appears that the number of suppliers in each category reflect the importance of each industry in Malaysia. As can be observed, E&E recorded the highest number of participants in this study, followed by chemicals and petroleum, automotive and, lastly machinery and equipment.

Table 4.8 Summary of the Supplier's Company Profile

	Frequency	Percentage (%)
Company revenue (in Ringgit Malaysia)		
Less than 9 million	31	25.4
10-49 millions	49	40.2
50-99 millions	20	16.4
100-149 millions	9	7.4
150-199 millions	8	6.6
More than 200 millions	5	4.1
Number of employees		
Less than 100	26	21.3
100-499	55	45.1
500-999	17	13.9
1,000-1,499	10	8.2
1,500-1,999	5	4.1
More than 2,000	9	7.4
Industry category		
Electrics and electronics	43	35.2
Chemicals and Petroleum	32	26.2
Automotive	25	20.5
Machinery and equipment	22	18.0

As shown in Table 4.9, more than 50 percent of the respondents generally hold middle management positions in their respective manufacturing companies. The reason for this could be that these managers, executives and engineers are directly involved with the operational processes and decision-making that goes on in outsourcing activities between their company and their foreign buyers. Besides this, they would have easy access to the foreign client's tacit knowledge stock and would have more direct contact with the client, especially when dealing with feedback and trouble-shooting while solving problems. As for functional responsibility, almost half (49 percent) of the

respondents are affiliated to the procurement and production functions. Usually, these respondents were directly associated with the manufacturing operations. On the other hand, around 30 percent stated that they were affiliated with the management function.

Table 4.9 Summary of the Respondent Profile

	Frequency	Percentage
Respondent's position		
President/Chairman/VP	4	8.2
CEO	1	28.7
Director	13	9.8
Executive	23	9.0
Manager	50	15.6
Engineer	31	28.7
Respondent's functional responsibility		
Management	37	30.3
Sales/marketing	12	9.8
Procurement	22	18
Production	38	31.2
R&D	13	10.7

4.5 Mean and Standard Deviation

Table 4.10 reports the descriptive results, such as the mean and standard deviation of each measurement scale. It can be specifically observed from this report that the means of tacit knowledge acquisition items are all greater than the median of the scale. This proves that the Malaysian suppliers do in fact acquire tacit knowledge via international outsourcing relationships.

Table 4.10 Results of Mean and Standard Deviation

Variables	Items	N	Mean	Standard Deviation
Prior Related Knowledge	1. Our company staff are equipped with excellent professional knowledge	122	4.9426	1.12301
	2. Our company staff can acquire quickly and thoroughly new knowledge required by the work they do	122	5.0902	1.09094
	3. Our company staff have good working skills	122	5.3934	0.86776
	4. Our company staff have high educational qualifications	122	4.8770	1.24368
	5. Our company staff are able to understand and organize the acquired knowledge	122	5.1885	0.99861
Business Relatedness	1. Our technology is related to that of our foreign buyer	122	4.9016	1.16001
	2. Our products is related to that of our foreign buyer	122	5.0656	1.16234
	3. Our industry is related to that of our foreign buyer	122	5.3033	1.12734
	4. Our customers is related to that of our foreign buyer	122	4.9016	1.19510
	5. Our skill base is related to that of our foreign buyer	122	4.8607	1.06263
	6. Our markets is related to that of our foreign buyer	122	4.6885	1.33039
Interactive involvement	1. We conduct on-site visits and tours to our foreign buyer's facility to increase our awareness on how their product is produced and used	122	4.8525	1.45268
	2. Our foreign buyer provides us with trainings and educational programs	122	4.0902	1.60580
	3. Our foreign buyer provides us with performance feedback	122	4.7705	1.32856
	4. Our foreign buyer visits our facility to help us improve our performance	122	5.0738	1.25420
	5. Our managers and foreign managers work together at our facility	122	5.1230	1.32102

	6. Our foreign buyer and we conduct structured meetings from time to time	122	5.1885	1.39854
	7. Our foreign buyer and we engage in joint problem solving	122	5.1475	1.05761
	8. Our foreign buyer and we engage in technology sharing	122	4.8443	1.16345
Trust	1. In this business relationship, we keep promises we make to each other	122	5.4508	1.03734
	2. Both parties are always honest with each other	122	5.1967	1.02562
	3. Each party believes the information provided by each other	122	5.3852	0.92215
	4. Both parties are genuinely concerned that the other's business succeeds	122	5.2213	0.97500
	5. When making important decisions, both parties consider each other's welfare as well as their own	122	5.1148	0.92885
	6. We trust both parties keep each other's best interests in mind	122	5.2131	0.92914
	7. We both find each other trustworthy	122	5.3361	0.87774
	8. There is no reason for both parties to be suspicious of one another	122	5.2787	1.06997
Interaction	1. We share sensitive information (financial, production, design, research or competition)	122	4.2377	1.58533
	2. We provide any information and new developments that might help each other	122	4.9672	1.17082
	3. We exchange information frequently, informally and in a timely manner	122	5.0902	1.24651
	4. We keep each other informed about events and changes that may affect the other party	122	5.1967	0.99286
	5. We have frequent face-to-face planning and communication	122	4.9426	1.17339
	6. We exchange performance feedback	122	5.0246	1.16749

Cultural Sensitivity	1. We understand how buyers and suppliers conduct business in our foreign buyer's country	122	4.7295	1.20630
	2. We are willing to adapt to the way our foreign buyer conducts business	122	4.8525	1.21064
	3. We are sensitive to the difficulties our foreign buyer encounters when doing business with Malaysian suppliers	122	4.8443	1.18545
	4. We are aware of how our foreign buyer conducts business inside their own country	122	4.6557	1.29698
Tacit knowledge acquisition	1. We have learned about the technological expertise from our foreign buyer	122	5.2049	1.11295
	2. We have learned about the manufacturing processes from our foreign buyer	122	5.3525	1.11283
	3. We have learned about the product development expertise from our foreign buyer	122	5.2295	1.21823
	4. We have learned about the marketing expertise from our foreign buyer	122	4.7541	1.22178
	5. We have learned about the foreign culture and tastes from our foreign buyer	122	4.9672	1.17786
	6. We have learned about the managerial techniques from our foreign buyer	122	4.8934	1.23186
Capability enhancement	1. Our company has improved its ability to anticipate potential market opportunities for new products	122	5.4016	0.93296
	2. Our company has improved its ability to rapidly commercialize new innovations	122	5.0656	1.06591
	3. Our company has improved its ability to anticipate surprises and crises	122	5.1066	1.01889
	4. Our company has improved its ability to quickly adapt its goals and objectives to industry changes	122	5.4508	0.92801
	5. Our company has improved its ability to decrease market response times	122	5.2459	0.94748
	6. Our company has improved its ability to be responsive to new market demands	121	5.3388	0.98787
	7. Our company has improved its ability to streamline its internal processes	121	5.4298	0.98172

Opportunity recognition	1. Our foreign buyer is important to us concerning market activities	122	5.6148	0.90405
	2. Our foreign buyer is important to us concerning information about new and important business contacts	122	5.2213	1.07958
	3. Our foreign buyer is important to us concerning product development	122	5.3852	1.00779
	4. Our foreign buyer has caused us an adaptation concerning product technology	122	5.2541	0.95832
	5. Our foreign buyer is important to us concerning production development	122	5.3197	1.08534
	6. Our foreign buyer has caused us an adaptation concerning production technology	122	5.2213	1.07190
	7. Our foreign buyer is important to us concerning technological information	122	5.2049	0.10550

4.6 Partial Least Square (PLS)

Mowery and Oxley (1996) highlight the fact that empirical research on knowledge transfer has commonly relied on anecdotes and assertions rather than primary data and statistical analysis. A similar situation applies in the case of tacit knowledge acquisition, as most academic journal articles on the issue are published based on conceptual and theoretical perspectives. Therefore, one of the contributions of this study is to depart from the various assumptions, particularly those concerning the acquisition of tacit knowledge, by making an effort to provide empirical support to the model proposed in the previous chapter. Having said about departing from the anecdotes and assumptions, PLS regression analysis, which is one of the structural equation modeling techniques, is applied in this study to obtain quantitative evidence about the acquisition of tacit

knowledge in international outsourcing relationships. PLS analysis was first developed in 1975 by Herman Wold (Wold et al. 2001), a Swedish statistician, for econometric modeling. It is commonly used in chemometrics quantitative analysis (Phatak et al. 1993; Wold et al. 2001). However, its application has been extended to other research disciplines (Jarvenpaaa and Staples 2000), including political science, economics and psychology (Fornell and Bookstein 1982). PLS has also been applied in business and management research in various areas, such as knowledge management in an international business context (Tsang et al. 2004), strategic management (Birkinshaw et al. 1995; Cool et al. 1989; Delios and Beamish 1999), intellectual capital (do Rosario Cabrita and Bontis 2008), marketing (Fornell and Bookstein 1982), entrepreneurship (Lee and Tsang 2001) and cooperative ventures (Fornell et al. 1990; Robins et al. 2002).

4.6.1 Why PLS?

PLS functions similarly to regression analysis (Chin et al. 2003). However, PLS is better than regression in the sense that it provides estimations of the suitability of all indicators and their respective constructs, as well as the strength of each path relationship. In this study, the PLS technique was selected over other statistical methods, such as traditional statistical analysis (e.g. multiple regression) and co-variance based structural equation modeling (SEM) for several primary reasons:

1. Its ability to accommodate smaller sample sizes.

   This characteristic of PLS is in contrast to other covariance-based SEM approaches (e.g. LISREL and EQS), which require a sample of at least 150. PLS can be applied using small to medium size samples (Chin 1998b). The current study was only able

to collect only 122 usable surveys, thus PLS was considered the most appropriate method of data analysis due to sample size restriction.

2. PLS is a rigorous technique that does not make normality assumptions about the data distribution (Cassel and Hackl 2000; Chin et al. 2003; Fornell and Larcker 1981a). This means that the data do not necessarily have to follow a multivariate normal distribution, as required by covariance-based SEM (Chin 1998b) and traditional multiple regression.
3. The use of PLS is considered appropriate when several relationships are being considered that have not been examined in other studies (Avolio et al. 1999). Thus, PLS is selected over other statistical methods because a number of the relationships predicted in this study have not been explored to a great extent in previous studies on tacit knowledge acquisition, as detailed below:
   a) Prior related knowledge → tacit knowledge acquisition
   b) Interactive involvement → tacit knowledge acquisition
   c) Interaction → tacit knowledge acquisition
   d) Cultural sensitivity → tacit knowledge acquisition
   e) Relational capital (trust, interaction and cultural sensitivity) → opportunity recognition
   f) Tacit knowledge acquisition → capability enhancement
   g) Tacit knowledge acquisition → opportunity recognition
   h) Capability enhancement → opportunity recognition

Besides the above-mentioned main reasons, other important factors as to why PLS is chosen over other analysis techniques include that, the method does not assume that the variables measured are free of errors (Fornell and Bookstein 1982) and that it generates reliability and validity statistics in the context of the theoretical model. On the other hand, the traditional path analysis, the calculation of reliability and validity statistics is independent of the model being tested. In fact, PLS often reveals associations that might not appear with a standard regression or other covariance-based SEM method (Wilcox 1998). In comparison, PLS produces statistical results that are more inclusive than those of the standard multiple regression technique (Wold et al. 2001). Other than that, PLS is considered an appropriate analysis method when the research is supported by a weak theory and unconvincing measures, whose connection with a specified model is still questionable (do Rosario Cabrita and Bontis 2008). In fact, Jarvenpaaa and Staples (2000) claim that PLS works well in a study at an early stage of theory development and testing (Jarvenpaaa and Staples 2000). Finally, Levitas and Ndofor (2006) suggest that a RBV research should employ modeling methods that are able to signify the interactions among resources and capabilities.

4.6.2 Reflective and formative indicators

It is important to determine the type of the measurement indicators or items prior to empirically testing a structural model using PLS analysis. There are two measurement approaches (Diamantopoulos and Siguaw 2006) regarding the relationship between the constructs and the measures: reflective and formative indicators. Reflective indicators are observed when the causality flows from the construct to the measures (Coltman et al.

2008) – that is, when the direction of the relationship is pointing from the construct to the measures (Diamantopoulos et al. 2008). This implies that the measures are caused and determined by the constructs (Avolio et al. 1999; Edwards and Bagozzi 2000), and thus, the measures are the reflections of the constructs (Fornell and Bookstein 1982). As a result of this situation, any changes in the measures will eventually be reflected in the changes of the constructs under study (Henseler et al. 2009).

In contrast, formative indicators are observed when the relationship is pointing in the opposite direction, that is, from the measures to the construct (Coltman et al. 2008; Diamantopoulos et al. 2008). These measures are the causes of the constructs (Bollen and Lennox 1991), which means the construct is formed (Fornell and Bookstein 1982) and defined (Henseler et al. 2009) by the combination of its measures. Formative indicators work as a group and together they give the conceptual and empirical meaning to the construct they represent (Jarvis et al. 2003). This indicates that all indicators should be included in the interpretation and analysis so as to accurately measure the construct (Baxter 2009). A change in an indicator or the absence of an indicator could cause a change in the construct (Coltman et al. 2008).

In the current study, all items are exclusively viewed as reflective indicators, and therefore the data analysis should include item reliability, convergent validity and discriminant validity in the assessment (Hulland 1999). In some cases, a measurement model can have both reflective and formative indicators, as is the case in the studies of Fornell et al. (1990) and Tsang et al. (2004). A recent example can be seen in an article

published in the Journal of International Business Studies. In their article entitled 'Assessing the cross-national invariance of formative measure: guidelines for international business researchers', Diamantopoulos and Papadopoulos (2010) identify 11 formative indicators of the product country image construct: workmanship, reliability, innovativeness, quality, after-sales service, availability, appearance, value-for-money, technical advancement, known brand name and product variety. As mentioned earlier, these attributes work as a group and together they define or give meaning to the product country image construct. If one of them is removed from the group, the construct will be affected, both from the theoretical and the empirical perspectives.

4.6.3 The PLS analysis technique

First of all, PLS is used to test the hypotheses and to validate the measurement and structural model. This analysis, which is performed using the SmartPLS software version 2.0, involves two steps (Hulland 1999). The first step is concerned with validating the measurement model, while the second step relates to assessing the structural model developed based on a theoretical framework. The measurement model demonstrates the association between the constructs and their measurement items (Diamantopoulos et al. 2008), which explains the strength of the items used to measure the constructs. The assessment of the measurement model can be considered critical it should be done before analyzing the structural model and describing its implications (Anderson and Gerbing 1982).

As explained earlier, the measurement model indicates the relationship between the constructs and the measures. On the other hand, the structural model illustrates the relationships between all constructs in the proposed model (Edwards and Bagozzi 2000). The second step helps to investigate the significance of the path coefficients in the model. The evaluation of the measurement model, followed by structural model, is important to ensure that the measures of the constructs are reliable and valid prior to making assumptions and conclusions about the overall construct relationships (Hulland 1999). Following Hulland's (1999) recommendation, the proposed model in this study is analyzed based on the above-mentioned two sequential steps: (1) assessment of the reliability and validity of the measurement model, and (2) evaluation of the structural model.

4.6.4 Assessment of the measurement model

In this study, the specified model contains 9 constructs and 57 measures, also known as items or indicators. In the evaluation of the measurement model, the reliability and validity of the measures are evaluated. In a simple way, reliability is related to the consistency of the measures, whereas validity is concerned with their accuracy (Hair et al. 2007). The most common approach used to test the consistency and accuracy of the measurement model in PLS is to examine internal consistency, convergent validity and discriminant validity (Fornell and Larcker 1981b; Gefen and Straub 2005; Wetzels et al. 2009). For this particular study, these three requirements are analyzed by closely following the reliability and validity procedures for PLS suggested by Hulland (1999) in his article on the application of PLS to strategic management research.

4.6.4.1 Item reliability

As recommended by Hulland (1999), the item reliability of all measurement items, or indicators, is explored through the evaluation of their individual factor loadings. The factor loadings in PLS have a similar interpretation to the loading outcomes of principal components factor analysis (Berson et al. 2001). Based on the PLS standpoint, the general rule of thumb is that a loading of 0.7 or more (Chin et al. 2003; Hulland 1999) is considered an indication of a reliable and satisfactory item. Nevertheless, there are a few researchers, who accept item loadings of at least 0.6 (Birkinshaw et al. 1995; Tsang et al. 2004), or even 0.5 (Aubert et al. 2004; do Rosario Cabrita and Bontis 2008), as their minimum thresholds. One of the main reasons for keeping lower item loadings is the exploratory nature of the studies (Jarvenpaaa and Staples 2000; Thompson and Higgins 1991). Other rationales include the fact that some of the items are still at an early stage of development (do Rosario Cabrita and Bontis 2008) or not well established (Tsang et al. 2004). Hulland (1999) recommends that weak items with loadings of less than 0.4 or 0.5 should be discarded from their corresponding constructs. He argues that inadequate loadings would result in less reliable measurements, poor content and construct validity and the inability to generalize the items and constructs to other contexts.

According to Birkinshaw et al. (1995), items with high factor loadings have a high degree of individual item reliability. Following this mainstream view, only items with factor loadings of 0.7 or more were retained in this study. Out of 57 items, seven with low individual item loadings ranging from 0.560 to 0.683 were dropped from their

respective constructs. Figure 1 shows the details of all factor loadings and removed items. The highlighted loadings indicate the poorly loaded items, which were excluded from further statistical analysis. They were associated with various constructs, namely prior knowledge (1 item), interactive involvement (3 items), trust (1 item), interaction (1 item) and opportunity recognition (1 item). After the weak items had been removed, the remaining total items were reduced to 50. Figure 4.2 illustrates the recalculated individual factor loadings for each item.

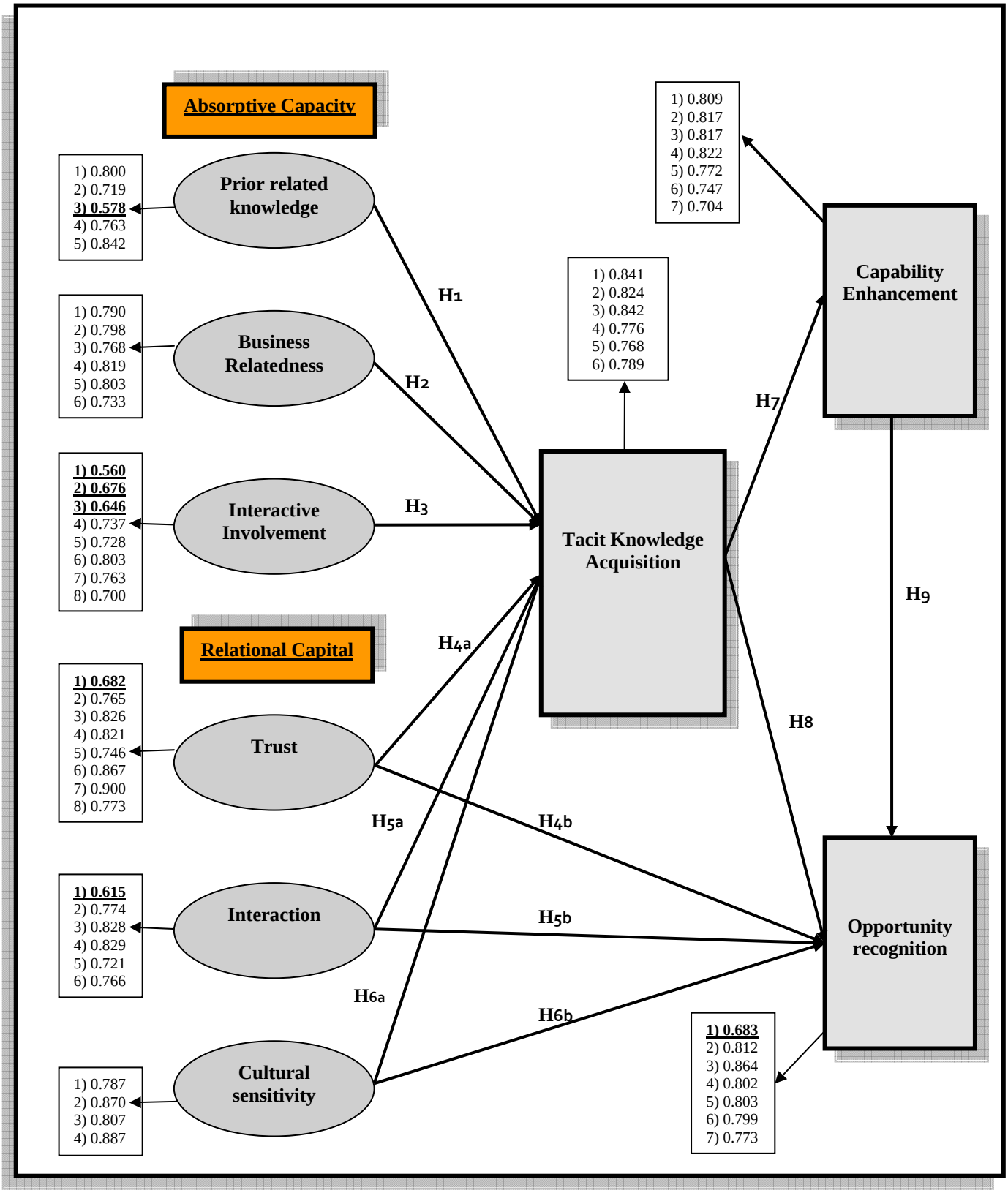


Figure 4.1 PLS Model with Hypotheses and Individual Item Loadings (before removal of weak items)

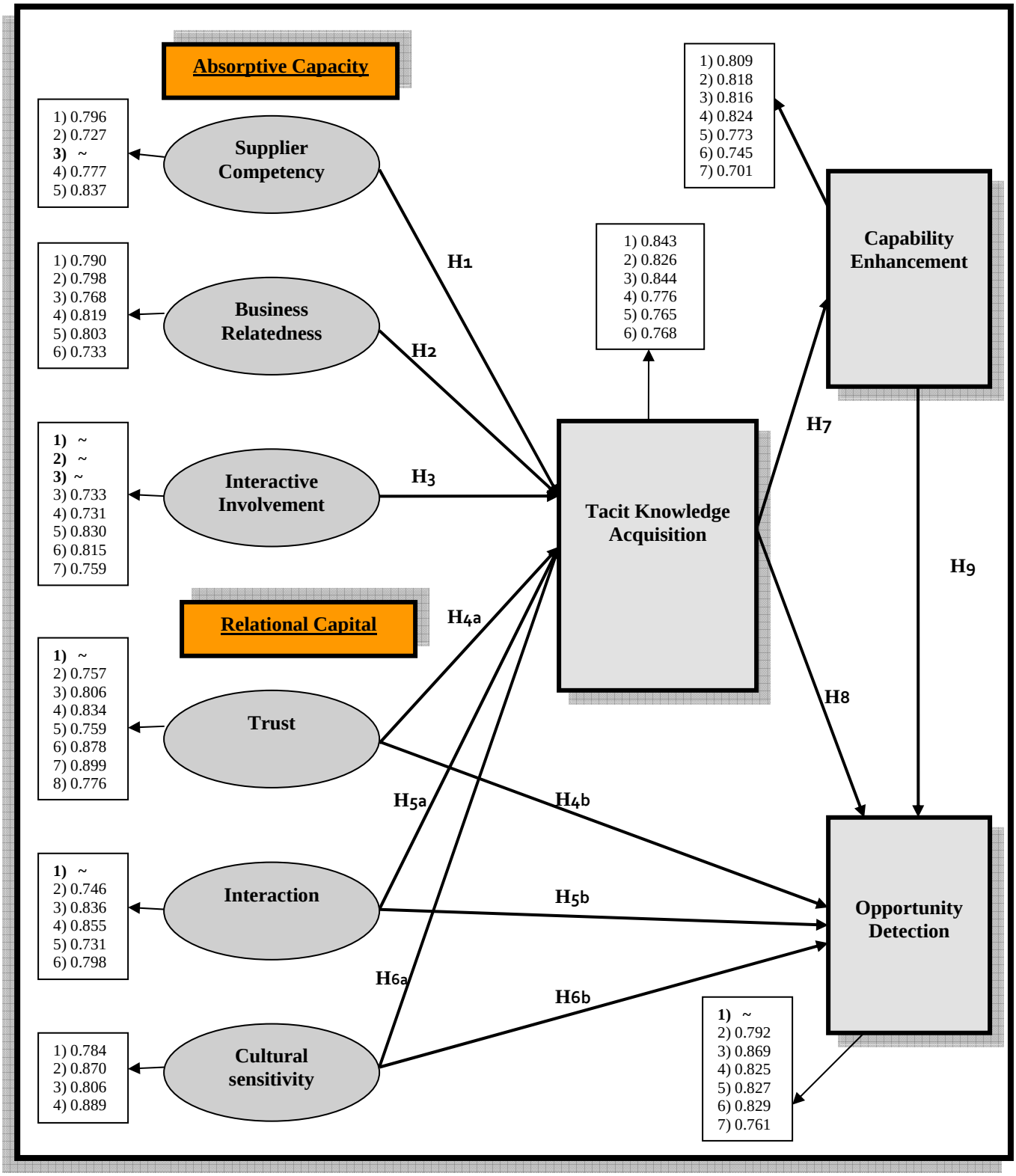


Figure 4.2 PLS Model with Hypotheses and Individual Item Loadings (after removal of weak items)

4.6.4.2 Convergent validity

In PLS, convergent validity is employed to verify whether each item is highly correlated to the construct it is intended to theoretically measure (Gefen and Straub 2005). This can be determined by assessing the composite reliability (Chin 1998b; Fornell and Larcker 1981a), computed using PLS, which is similar to the standard Cronbach's alpha (Fornell and Larcker 1981a). A number of studies (Jarvenpaaa and Staples 2000; Tsang et al. 2004) include both composite reliability and Cronbach's alpha in order to show convincing evidence of convergent validity. As can be observed in Table 4.11, all the composite reliability values exceed 0.8, while Cronbach's alpha scores report a minimum loading of 0.796. These values are well above the reliability threshold of 0.7 proposed by Nunnally (1978).

In addition to composite reliability and Cronbach's alpha, Fornell and Larcker (1981a) also suggest measuring convergent validity through an assessment of the average variance extracted (AVE). They recommend 0.5 as the minimum threshold for AVE in order to establish adequate convergent validity. This analysis can be applied to explain the amount of variance shared by the items in each construct (Howell and Avolio 1993; Johnston et al. 2004). Table 4.11 reports that the AVEs of all constructs exceed the proposed 0.5 benchmark as all of the AVE values range from 0.6 to 0.7. Overall, all of these results show that every construct employed in this study demonstrates strong convergent validity.

Table 4.11 Average Variance Extracted, Composite Reliability and Cronbach's Alpha

No	Constructs	No. of Items	AVE	Composite Reliability	Cronbach Alpha
1	Business relatedness	6	0.617342	0.906259	0.876
2	Capability enhancement	7	0.616207	0.918069	0.897
3	Cultural sensitivity	4	0.703086	0.904274	0.863
4	Interaction	5	0.631635	0.895194	0.854
5	Interactive involvement	5	0.600658	0.8822340	0.833
6	Opportunity recognition	6	0.668835	0.923649	0.900
7	Prior related knowledge	4	0.616552	0.865144	0.796
8	Tacit knowledge	6	0.651570	0.918048	0.893
9	Trust	7	0.668076	0.933468	0.919

4.6.4.3 Discriminant validity

Disriminant validity reflects the extent to which the measures in one construct are unique and different from the measures in other constructs within a specified model (Aubert et al. 1996; Hulland 1999). Discriminant validity is assumed to be adequate if each measurement item is highly correlated with its theoretically associated construct, but at the same time is weakly correlated with the other constructs (Gefen and Straub 2005; Thompson and Higgins 1991). To evaluate the discriminant validity, the AVE of each construct, as displayed in Table 4.11, is used for AVE analysis. The rule of thumb for signifying satisfied discriminant validity is that the square root of the AVE for each construct must be greater than the correlation between that construct and any other constructs in the model (Fornell and Larcker 1981a; Hulland 1999). The square root of each AVE simply represents the variance shared between that construct and its measurement items.

The correlation matrix in Table 4.12 demonstrates that all highlighted diagonal elements, which are the square roots of the AVE values, are much higher than the correlations among the constructs, shown in the lower left off-diagonal elements. In line with the recommendation put forth by Hulland (1999), the highlighted values are also greater than the off-diagonal elements located in the corresponding rows and columns. For example, there is a correlation of 0.377 between business relatedness and capability enhancement, while the square roots for the two constructs are 0.786 and 0.785 respectively. In another example, the square root of interaction's AVE (0.795) is greater than all the correlations in its corresponding rows and columns. These results show that the discriminant validity of the measurement model is satisfactory.

Table 4.12 Discriminant Validity and Correlation Matrix between Latent Variables

	BREL	CAP	CUL	INTE	LMET	OPP	PRIO	TAC	TRU
Business related.	**0.786**								
Capability enhance.	0.377	**0.785**							
Cultural sensitivity	0.183	0.324	**0.839**						
Interaction	0.274	0.468	0.520	**0.795**					
Interactive involve.	0.321	0.417	0.234	0.508	**0.775**				
Opportunity recog.	0.085	0.425	0.300	0.432	0.258	**0.818**			
Prior knowledge	0.446	0.286	0.243	0.287	0.282	0.122	**0.785**		
Tacit knowledge	0.360	0.593	0.339	0.475	0.468	0.500	0.239	**0.807**	
Trust	0.280	0.373	0.429	0.516	0.337	0.374	0.312	0.327	**0.817**

4.6.5 Assessment of the structural model

As the reliability and validity of the measurement model has been established, the next stage is to interpret the results of the structural model, which are presented in Figure 4.3. These outcomes were derived using PLS statistical analysis with the primary objectives of testing the hypotheses and the structural model. PLS generates two important pieces of information that can be used to examine the overall model and the hypothesized relationships: the amount of variance explained (R^2) and the path coefficients.

4.6.5.1 Evaluation of the amount of variance explained (R^2)

According to Hulland (1999), the main objective of PLS is to maximize the variance explained in the endogenous constructs, which can be materialized through the observation of R^2. R^2 is the squared multiple correlations and describes the amount of variance explained by the dependent variables, and thus the model's explanatory power (Fornell and Larcker 1981a). This means that R^2 value indicates the ability to estimate the strength of the model (Falk and Miller 1992). According to Chin (1998a), R^2 values of 0.67, 0.33 and 0.19 can be interpreted as substantial, moderate and weak, respectively. Henseler et al. (2009) argue that the interpretation level of R^2 should depend on how many exogenous variables represent the endogenous variables. On the other hand, in their study on trust in cooperative supplier relationships, Johnston et al. (2004) report that their R^2 values are between 0.277 and 0.340 for the trust dimensions and refer to these results as indicating a considerable amount of variance explained. Similarly, in a situation where R^2 is reported at a moderate level, Jarvenpaaa and Staples (2000) regard their R^2 value of 0.292 as an indicator that the amount of variance explained by their

model is moderately satisfactory. In this study, the R^2 values are all above the minimum value of 0.19, emphasized by Chin (1998a). The amount of variance explained, as shown in Figure 4.3, reveals the R^2 values are 0.342 for tacit knowledge acquisition, 0.352 for capability enhancement and 0.326 for opportunity recognition. Following Jarvenpaaa and Staples (2000) and Johnston et al. (2004), who obtain very similar R^2 values to those obtained in the present study, the R^2 values for the structural model, can be interpreted as showing that the model explains a reasonable amount of the variance in the endogenous latent variables (dependent variables). Consequently, the result indicates that the overall structural model has moderate and acceptable predictive power and that an adequate percentage of variance (R^2) is explained for all dependent constructs in this study.

4.6.5.2 Evaluation of path coefficients

Figure 4.3 also illustrates the path coefficients estimated, which are the standardized regression coefficients (Thompson and Higgins 1991), computed using the PLS analysis. The purpose of the estimation is to examine the signs, levels and significance of the path relationships proposed in the structural model (Henseler et al. 2009). To do so, the statistical significance of all paths is identified using the 500 bootstrapping resampling-technique. The path coefficients should be at least 0.1 (Chin 1998a; Chin 1998b). This minimum criterion has been adopted in several other studies, that employ PLS as a method of structural model analysis, related to marketing management (Lings and Owen 2007) and international entrepreneurship (Fink et al. 2008). Table 4.13 presents the path coefficients, which produce some unexpected results.

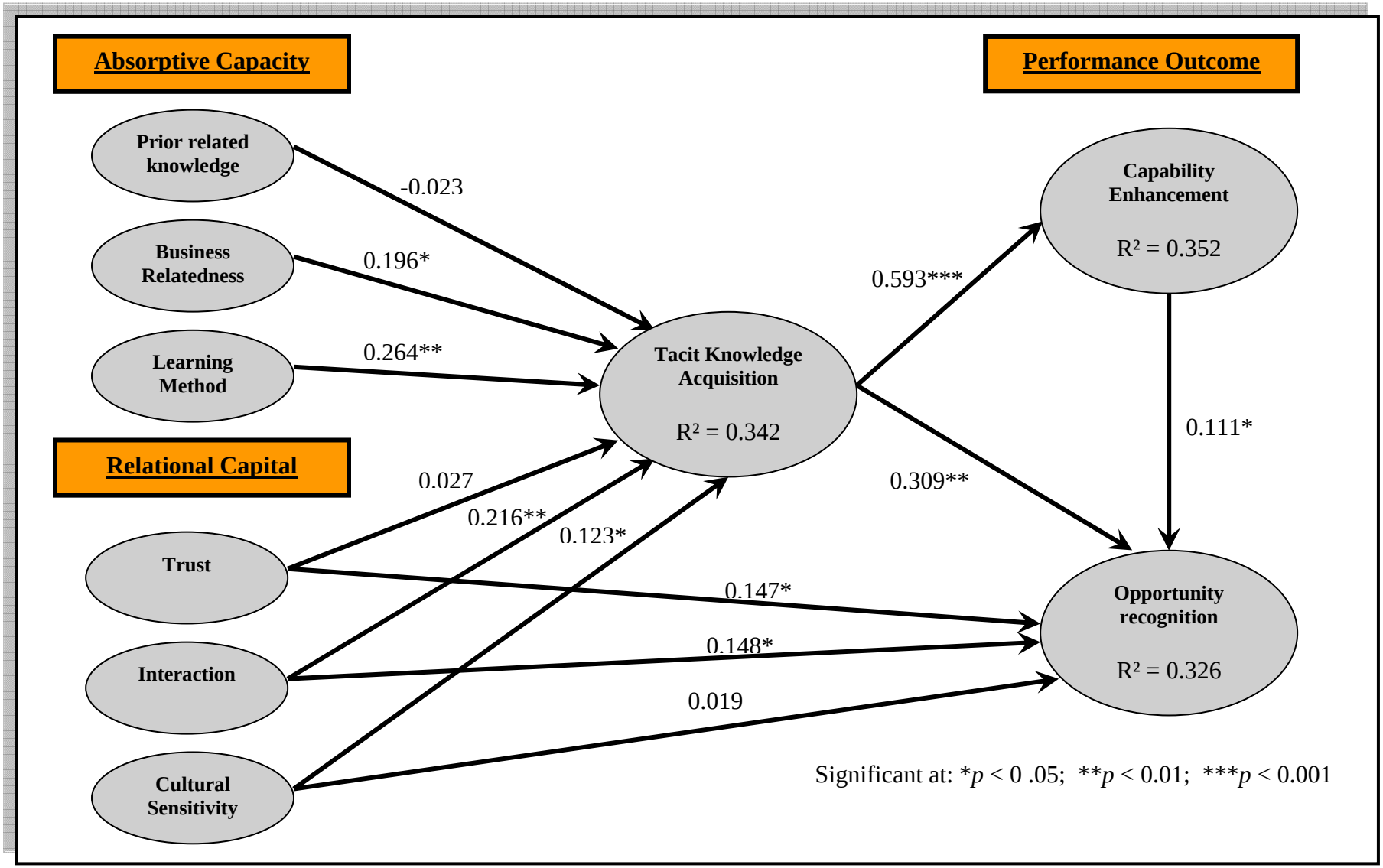


Figure 4.3 Path Coefficients and the Amount of Variance Explained (R^2) for the Overall Structural Model

It can be observed that the structural model in this study consists of 12 hypothesized relationships, all of which are predicted to be positive. Based on the results of the PLS analysis, one of the path relationships is found to be highly significant at the 0.001 level, three paths significant at the 0.01 level and five are significant at the 0.05 level. The remaining three relationships are not significant at all. In fact, one of these insignificant paths displays an unpredicted result. Instead of a significant and positive relationship, as hypothesized earlier, it appears to have an insignificant relationship with a negative sign. Specifically, four strongly significant path coefficients are found in the relationships between interactive involvement and tacit knowledge acquisition (MET→TAC), interaction and tacit knowledge acquisition (INTE→TAC), tacit knowledge acquisition and capability enhancement (TAC→CAP) and finally the relationship between tacit knowledge acquisition and opportunity recognition (TAC→OPP). None of the relational capital factors are found to strongly affect the suppliers' opportunity recognition.

A further five relationships are found to be reasonably significant: business relatedness to tacit knowledge acquisition (REL→TAC), cultural sensitivity to tacit knowledge acquisition (CUL→TAC), trust to opportunity recognition (TRU→OPP), interaction to opportunity recognition (INTE→OPP) and finally capability enhancement to opportunity recognition (CAP→OPP). Finally, as notified earlier, several insignificant path coefficients are discovered in this study's structural model. As exhibited in Table 4.13 and clearly portrayed in Figure 4.3, two paths are insignificant but positive: trust to tacit knowledge acquisition (TRU→TAC) and cultural sensitivity to opportunity recognition (CUL→OPP), while the path coefficient between prior related knowledge and tacit knowledge acquisition

(PRIO→TAC) is not only insignificant, but not even in the positive direction, as it is initially predicted.

4.7 Results of Hypothesis Testing

The model in Figure 4.3 has been developed to explain the impact of absorptive capacity and relational capital factors on tacit knowledge acquisition and two other extended performance outcomes: capability enhancement and opportunity recognition. In this model, hypotheses H_1, H_2 and H_3 are established to verify whether or not significant relationships exist between the Malaysian suppliers' absorptive capacity and their tacit knowledge acquisition. Hypotheses H_{4a}, H_{5a} and H_{6a} are all related to the consequences of relational capital on tacit knowledge acquisition, while H_{4b}, H_{5b} and H_{6b} explore the effects of elements of relational capital on a supplier's opportunity recognition. As for hypotheses H_7 and H_8, they are proposed in an effort to determine whether or not tacit knowledge acquisition affects the local supplier' capability enhancement and opportunity recognition. Finally, hypothesis H_9 proposes a link between capability enhancement and opportunity recognition. The results relating to each of these hypothesized relationships will be explained in the following paragraphs.

H_1: The Malaysian suppliers' prior related knowledge is expected to be pivotal in the acquisition of tacit knowledge as it helps them to understand better the foreign buyers' requirements.

Hypothesis H_1 refers to the relationship between the Malaysian supplier's prior related knowledge and their tacit knowledge acquisition. It is proposed that a supplier's existing knowledge, skills and ability will positively affect the amount of

tacit knowledge it acquires from a foreign buyer. However, as revealed in Table 4.13, this proposition is not supported because the results demonstrate no association between prior related knowledge and tacit knowledge acquisition, thus this relationship is not significant (n.s.). Furthermore, an unexpected negative relationship is observed between these two constructs (path coefficient= -0.022, p = n.s.). A possible explanation of this result will be provided in the discussion chapter, which follows this one.

H_2: If the businesses of the Malaysian suppliers and their foreign buyers are related, it will have a positive effect when acquiring the tacit elements of the buyers' requirements.

Hypothesis H_2 states that business relatedness will have a positive influence on a supplier's tacit knowledge acquisition. This hypothesis is found to be supported (path coefficient=0.196, $p<0.05$). As predicted, the relationship between business relatedness and tacit knowledge acquisition is significantly positive. This suggests that if a Malaysian supplier's business is similar to that of its foreign buyer, the tacit knowledge learned from the buyer will be greater, as both partners can relate to the other's products, manufacturing technologies and business operations.

H_3: Interactive involvement will positively facilitate the Malaysian suppliers' acquisition of tacit knowledge in understanding their foreign buyers' requirements.

Hypothesis H_3 is based on the interactive involvement or learning methods applied by and accessible to the local suppliers. It is predicted that various ways of learning, such as on-site visits, problem solving and training, will have a positive effect on a

supplier's tacit knowledge acquisition. As detailed in Table 4.13, interactive involvement is found to be strongly related to the tacit knowledge obtained from the foreign buyers (path coefficient=0.266, p<0.01). The relationship between these two constructs indicates the significance of interactive involvement as an important factor in a Malaysian supplier's tacit knowledge acquisition.

Table 4.13 Path Coefficients and Results of Hypothesis Testing

Predictors		Prediction	Hypo.	Sign	Path Coefficient	Sig.
Prior related knowledge	→	Tacit knowledge acqui.	H1	-	0.023	x
Business relatedness	→	Tacit knowledge acqui.	H2	+	0.196	*
Interactive involvement	→	Tacit knowledge acqui.	H3	+	0.264	**
Trust	→	Tacit knowledge acqui.	H4	+	0.027	x
Trust	→	Opportunity recognition	H4a	+	0.147	*
Interaction	→	Tacit knowledge acqui.	H5	+	0.216	**
Interaction	→	Opportunity recognition	H5a	+	0.148	*
Cultural sensitivity	→	Tacit knowledge acqui.	H6	+	0.123	*
Cultural sensitivity	→	Opportunity recognition	H6a	+	0.019	x
Tacit knowledge acqui.	→	Capability enhancement	H7	+	0.593	***
Tacit knowledge acqui.	→	Opportunity recognition	H8	+	0.309	**
Capability enhance.	→	Opportunity recognition	H9	+	0.111	*
Total			**12**			

Significant at: *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$ x = not significant

H_{4a}: Trust between the Malaysian suppliers and their foreign buyers is predicted to be related with the acquisition of tacit knowledge by the suppliers.

Hypothesis H_4 was proposed to look at whether or not trust plays an essential role in the Malaysian suppliers' tacit knowledge acquisition. It was proposed that trust developed between partners would help the Malaysian suppliers to acquire more tacit knowledge from their foreign buyers. Despite many arguments regarding its

importance in the knowledge acquisition or transfer process, the results shown in Table 4.13 demonstrate that this factor does not influence the Malaysian suppliers' tacit knowledge acquisition. Although the relationship between trust and tacit knowledge acquisition is found to be positive (path coefficient = 0.027), the result is not significant (p=n.s.). As a result, this hypothesis is not supported.

H_{4b}: The more the Malaysian suppliers and their foreign buyers trust each other, the greater will be the local suppliers' opportunity recognition.

Hypothesis H_{4b} implies that trust is also expected to contribute to a Malaysian supplier's opportunity recognition. It explains that if a supplier gains the trust of its foreign buyer, then the supplier should receive new opportunities from the foreign buyer or other external network. The results show that there is a significant and positive effect of trust on opportunity recognition (path coefficient=0.147, $p<0.05$). This indicates that the hypothesis can be accepted. Thus, the more trust is built between partners, the more potential opportunities from the foreign buyers will be accessible to the local Malaysian suppliers.

H_{5a}: Interaction between the Malaysian suppliers and their foreign buyers will have a positive effect on the suppliers' learning of the tacit elements of the foreign buyers' requirements.

Hypothesis H_{5a} predicts that interaction between the Malaysian suppliers and their foreign buyers will be positively related to the suppliers' tacit knowledge acquisition. Put differently, the more the suppliers interact with their foreign buyers during the outsourcing relationship, the more tacit knowledge of partners' product requirements they could acquire from them. As can be seen in Table 4.13, the relationship between

partner interaction and tacit knowledge acquisition is clearly positive and significant (path coefficient=0.216, p=<0.05). This supports hypothesis H_{5a} implying a strong connection between interaction and tacit knowledge acquisition.

H_{5b}: Interaction between the Malaysian suppliers and their foreign buyers has a positive effect on the suppliers' opportunity recognition.

Hypothesis H_{5b} expresses the association between the partners' interaction and the supplier's opportunity recognition. It is expected that interaction between the supplier and their foreign buyer will have a positive impact on the supplier's opportunity recognition. The results in Table 4.13 suggest that there is indeed a positive and significant relationship between interaction and opportunity recognition (path coefficient=0.148, p<0.05). Therefore, this hypothesized prediction is supported. This suggests that when both partners interact with each other, the quality of the relationship will improve because interaction increases socialization and reduces conflict between partners. These conditions will result in greater opportunity sharing due to a comfortable business partnership.

H_{6a}: The greater is the Malaysian suppliers' sensitivity to their foreign buyers' business cultures, the more tacit knowledge they will acquire through their international outsourcing relationships.

Hypothesis H_{6a} pertains to assessing the significance of the supplier's business-related cultural sensitivity for its tacit knowledge acquisition. The results of the hypothesis testing indicate a positive and statistically significant relationship between the two constructs (path coefficient=0.123, p=<0.05). This proves that if Malaysian suppliers are alert and sensitive to their foreign buyers' business cultures, they may

acquire more tacit knowledge from them. Therefore, support is found for hypothesis H_{6a} since there is a positive relationship between cultural sensitivity and tacit knowledge acquisition.

H_{6b}: Greater cultural sensitivity towards their foreign buyers' business cultures positively affects the Malaysian suppliers' opportunity recognition.

Hypothesis H_{6b} is formulated to verify the implications of cultural sensitivity for opportunity recognition. It is expected that the discovery of opportunities may be affected by the suppliers' responsiveness to the business-related cultural differences between them and their foreign buyers. However, Table 4.13 shows that cultural sensitivity is not significantly associated with opportunity recognition (path coeffiecient=0.019, p=n.s.). Therefore, this hypothesis is not supported given that the p value is below the critical threshold for significance.

H_7: Tacit knowledge acquisition from international outsourcing relationships is positively related to the Malaysian suppliers' capability enhancement.

Hypothesis H_7 concerns the effect of tacit knowledge acquisition on the Malaysian supplier's capability enhancement. Specifically, it is hypothesized that there will be a positive link between tacit knowledge acquisition and capability enhancement. Table 4.13 supports the importance of tacit knowledge acquired to a Malaysian supplier's capability and efficiency since a positive and strongly significant path relationship is found in the model (path coefficient=0.593, $p<0.001$), also demonstrated in Figure 4.3. This outcome confirms the proposition that the tacit knowledge learned from a foreign buyer is a crucial element in the improvement of a local supplier's capability. Thus, this hypothesis is very well supported.

H_8: Tacit knowledge learned through international outsourcing relationships positively affects the Malaysian suppliers' opportunity recognition.

Hypothesis H_8 investigates the impact of tacit knowledge acquisition on the supplier's organizational achievement. In this case, it is hypothesized that in addition to improving the supplier's capabilities, the tacit knowledge acquired from the foreign buyer will also positively affect the supplier's opportunity. As shown in Table 4.13, the result for this hypothesis is relatively similar to that for hypothesis H_7. As predicted, the Malaysian supplier's tacit knowledge acquisition has a positive and strongly significant impact on its opportunity recognition (path coefficient=0.309, $p<0.01$). Thus, this hypothesis is strongly supported, revealing that the tacit knowledge acquired from a foreign buyer does contribute significantly towards a supplier's prospect of generating business opportunities.

H_9: The Malaysian suppliers' capability enhancement is positively linked to their recognition of their future business opportunities.

Hypothesis H_9 assumes that the supplier's capability enhancement would lead to the recognition of more business opportunities. From the results presented in Table 4.13, the relationship between capability enhancement and business opportunities is found to be significant ($p=0.111$, $p=<0.05$). Even though the hypothesis is only weakly supported, the connection between the constructs is positive. Thus, this newly-proposed relationship is worth further investigation and the result deserves further discussion. The summary of all hypotheses and their results are exhibited in Table 4.14

Table 4.14 Summary of the Hypothesis Testing

	Specific Hypotheses	Results
H_1	The Malaysian suppliers' prior related knowledge is expected to be pivotal in the acquisition of tacit knowledge as it helps them to understand better the foreign buyers' requirement.	Not supported
H_2	If the businesses of the Malaysian suppliers and their foreign buyers are related, it will have a positive effect when acquiring the tacit elements of the buyers' requirements.	Supported
H_3	Interactive involvement will positively facilitate Malaysian suppliers' acquisition of tacit knowledge in understanding their foreign buyers' requirements.	Supported
H_{4a}	Trust between the Malaysian suppliers and their foreign buyers is predicted to be related with the acquisition of tacit knowledge by the suppliers.	Not supported
H_{4b}	The more the Malaysian suppliers and their foreign buyers trust each other, the greater will be the local suppliers' opportunity recognition.	Supported
H_{5a}	Interaction between the Malaysian suppliers and their foreign buyers will have a positive effect on the suppliers' learning of the tacit elements of the buyers' requirements.	Supported
H_{5b}	Interaction between the Malaysian suppliers and their foreign buyers has a positive effect on the suppliers' opportunity recognition.	Supported
H_{6a}	The greater is the Malaysian suppliers' sensitivity to their foreign buyers' business cultures, the more tacit knowledge they will acquire through international outsourcing relationships.	Supported
H_{6b}	Greater cultural sensitivity towards their foreign buyers' business cultures will positively affect the Malaysian suppliers' opportunity recognition.	Not supported
H_7	Tacit knowledge acquisition from international outsourcing relationships is positively related to the Malaysian suppliers' capability enhancement.	Supported
H_8	Tacit knowledge learned through international outsourcing relationships positively affects the Malaysian suppliers' opportunity recognition.	Supported
H_9	The Malaysian suppliers' capability enhancement is positively linked to their recognition of future business opportunities.	Supported

4.8 Additional statistical analysis

Additional examinations were carried out to identify whether significant differences, in terms of tacit knowledge acquisition, existed between Malaysian suppliers from different categories. A one-way analysis of variance (ANOVA) was conducted to evaluate any significant differences in the mean values of tacit knowledge acquisition across various groups of Malaysian manufacturing suppliers. As can be observed in Table 4.15, the result shows no significant differences in the acquisition of tacit knowledge between the groups, with all differences being insignificant at $p>0.10$. Therefore, following the justification of Dhanaraj et al. (2004), the suppliers' characteristics were not included in the current model as control variables.

Table 4.15 ANOVA Results Across the Supplier Groups

Categories	N	Mean	Std. Dev	Sig.
Industry				
Electrics & Electrical	43	4.9225	0.9836	0.250
Chemicals & Petroleum	32	5.1823	1.0771	
Automobile	25	5.3267	0.7780	
Machinery & Equipment	22	4.8864	0.8316	
Origin of foreign buyers				
Asia	57	4.9444	0.9319	0.306
Europe	30	5.2889	0.9054	
North America	18	5.1296	1.1570	
Middle East	7	4.9048	0.5681	
Africa	5	5.6333	0.3613	
Oceania	5	4.5667	1.2561	
Duration of relationship				
1-5 years	43	4.8333	0.9287	0.064
6-10 years	57	5.1140	0.9550	
11-25 years	22	5.4015	0.9037	

CHAPTER FIVE

DISCUSSION

5.1 Introduction

This empirical study aims to investigate the phenomenon of tacit knowledge acquisition through international outsourcing relationships from the perspective of Malaysian manufacturing suppliers. This initiative is inspired by two research questions: (1) How do Malaysian manufacturers acquire tacit knowledge through international outsourcing relationships? (2) Does the tacit knowledge so acquired affect the local suppliers' performance? Hence, the main purpose of this study is to examine the key elements of tacit knowledge acquisition and its impact on the local suppliers' capabilities and potential opportunities. In order to address the research questions and meet the research objectives, the relevant literatures were reviewed beforehand, particularly those related to knowledge management and international business relationships. Having obtained an adequate review of the significant subject matter, a conceptual model was developed and a number of hypotheses are formulated. Then, results were generated using PLS analysis and used to verify the model and test the hypotheses.

In this chapter, the main results pointed out in Chapter Four will be discussed, evaluated and compared with previous studies. Some of the findings are similar to those of previous studies, while others contradict them. New findings have also been produced as a result of the integration of different constructs from the international business and knowledge management literatures. By referring to previous studies,

these similarities and contradictions in the results will be justified in this chapter. Finally, the theoretical and managerial implications will be highlighted.

5.2 Discussions of Results

The previous chapter showed that the data supported only some of the hypotheses regarding the main elements that affect tacit knowledge and its consequences for local suppliers' performance. A number of interesting findings resulted from the data analysis. The statistical significance or insignificance of these findings will be clarified in the following sections. Basically, out of 12 hypotheses, three were not significant. The conceptual model from Chapter Two is displayed again in Figure 5.1, now indicating which hypotheses were supported and which were not. The following sections will discuss and interpret each of the hypotheses tested using the PLS analysis.

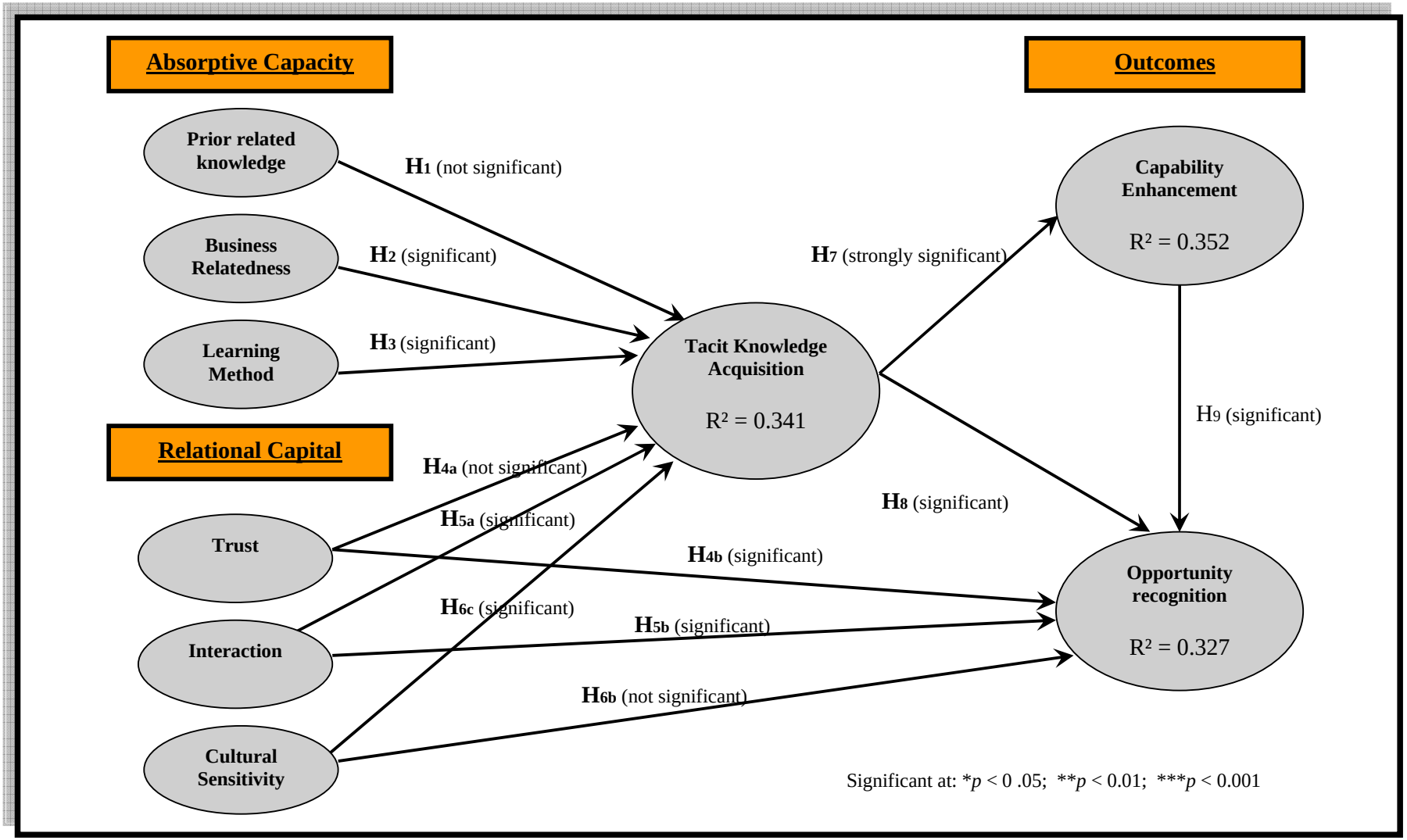


Figure 5.1: A Conceptual Model of Tacit Knowledge Acquisition in International Outsourcing Relationships – Results

5.2.1 Absorptive capacity and tacit knowledge acquisition

Prior studies have cited absorptive capacity as one of the most influential components of interfirm knowledge transfer (Simonin 1999; Srivastava 2009), knowledge acquisition (Lyles and Salk 1996) and knowledge sharing (Tsai 2001). As described by Cohen and Levinthal (1990), absorptive capacity is a company's ability to recognize, assimilate and apply new external knowledge for a commercial development. Having the access and ability to learn a new knowledge from foreign buyers, especially tacit knowledge, would give Malaysian manufacturing suppliers an advantage in their attempts to enhance company performance. Since tacit knowledge is highly regarded as a potential source of a sustained competitive advantage, it is important that suppliers demonstrate absorptive capacity, so that they can better capture and exploit the tacit knowledge they learn through international outsourcing collaborations. It is argued in the current study that prior related knowledge, business relatedness and interactive involvement are among the central elements of absorptive capacity that suppliers need if they are to efficiently acquire tacit knowledge from external sources. In other words, these three constructs are essential to the supplier's absorptive capacity. The relationships between these three elements and the supplier's tacit knowledge acquisition are captured by Hypotheses H_1, H_2 and H_3. Out of the three, only two are supported by the data. The third relationship, concerning prior related knowledge, is shown to be negative and insignificant.

5.2.1.1 Prior related knowledge and tacit knowledge acquisition

The first hypothesis, H_1, proposed in Chapter Four specifies the relationship between prior related knowledge and tacit knowledge acquisition. In the current study, prior

related knowledge is defined as the combination of the supplier's employees' basic knowledge and skills, quality, potential and ability to understand and exploit the new tacit knowledge learned from buyer-supplier collaborations. It would seem that a supplier with skilled and competent employees would have the opportunity and ability to acquire valuable tacit knowledge while working with their foreign counterparts. Therefore, this study speculated that the Malaysian suppliers' prior related knowledge would positively facilitate their acquisition of tacit knowledge. This explains that the Malaysian suppliers will acquire more tacit knowledge during the collaboration if they possess good quality employees, who are capable of obtaining and applying tacit knowledge for the benefit of their companies.

However, the results for Hypothesis H_1 indicate that the relationship between the Malaysian suppliers' prior related knowledge and their tacit knowledge acquisition is not significant. In fact, the relationship is also found to be negative, suggesting that prior related knowledge is not one of the predictors of absorptive capacity that affect a supplier's tacit knowledge acquisition. This finding contradicts the result of Thuc Anh et al. (2006), who found that the ability to learn is an influential element in determining tacit knowledge acquisition through interfirm relationships. This surprising finding also contrasts with the positive and significant relationship found by Liao et al. (2007) between employees' ability to learn and knowledge sharing. In their study on knowledge sharing in Taiwan's knowledge-intensive industries, they define prior related knowledge as employees' learning ability and prove that this construct is one of the main determinants of a firm's absorptive capacity, which in turn facilitates the process of

knowledge sharing between counterparts. The insignificant finding in the current study, however, is similar to the one established by Minbaeva et al. (2003), who regard prior related knowledge as employees' ability to learn. Their results indicate that employees' ability to learn and knowledge transfer are not significantly related. Nevertheless, they discover that employees' ability to learn will only positively influence the knowledge transfer process when it is paired with another absorptive capacity's predictor - the employees' motivation. In this case, the result of the current study could have been different if the prior related knowledge was also accompanied by other relevant construct, whereby both would make a perfect match to simultaneously give a good impact to the supplier's tacit knowledge acquisition. This idea should be materialized in a future research so that its result can be used as a comparison.

The insignificance of the relationship between prior related knowledge and tacit knowledge found in this study is quite unexpected as firm competency is known to be a requirement for learning (Lane et al. 2001). One possible explanation for this finding could be that prior related knowledge is not a critical predictor of acquiring tacit knowledge. In other words there may be other factors that have greater impact. The complicated nature of tacit knowledge makes it quite problematic to either interpret or acquire it (Cavusgil et al. 2003; Koskinen 2000). It is characterized as being nonverbalized and unarticulated (Polanyi 1967) and difficult to formalize or communicated (Nonaka 1994), in contrast to explicit knowledge that can be obtained from textbook and documents (Koskinen and Vanharanta 2002; Lee and Yang 2000). As a result, there are possibly other more influential determinants of the acquisition of

tacit knowledge, determinants that may be specifically relevant to the context of international outsourcing relationships between Malaysian manufacturing suppliers and international buyers.

It is argued that tacit knowledge can only be learned through practical experience and close interaction (Eng 2005; Lam 2000). Therefore, a Malaysian supplier could acquire the tacit dimension of various types of knowledge from its foreign buyers, regardless of its employees' competence. For example, such knowledge can be acquired by sending managers to the foreign buyer's facilities to observe its processes and work there for a period of time. In this way, employees gain advantages from direct interaction and learning-by-doing. In addition, interactive problem-solving (Lam 2000) involving both partners could provide an opportunity for the Malaysian suppliers to absorb new tacit knowledge. If this type of involvement and participation takes place regularly among the Malaysian manufacturing suppliers and their foreign buyers, then prior related knowledge may not be so important for the former group's acquisition of tacit knowledge.

Given the intricate features of tacit knowledge, its acquisition requires more interactive and experiential learning rather than the normal formal learning, which may explain the lack of connection between the Malaysian suppliers' prior related knowledge and their tacit knowledge acquisition. Thus, although prior related knowledge is important, as it provides a basic platform of absorptive capacity that should help the Malaysian suppliers to recognize and assimilate new strategic knowledge more easily during their interaction

and collaborative activities with the foreign buyers, it may not be critical in this context if the latter provide the former with the necessary trainings and technical assistance. Finally, another justification of why prior related knowledge may have a negative, but insignificant, effect on the Malaysian suppliers' acquisition of tacit knowledge is due to the measurement items used for prior related knowledge. The items used in this study may not realistically capture the Malaysian suppliers' ability to identify, absorb and exploit the tacit knowledge they gain from external sources. Nevertheless, even though it appears that prior related knowledge does not aid the Malaysian suppliers' process of acquiring tacit knowledge from international outsourcing collaborations, it does not seem to hinder it either. The descriptive results show that, despite the insignificant effect of prior knowledge, the suppliers are still managing to acquire tacit knowledge that can enhance their capabilities.

5.2.1.2 Business relatedness and tacit knowledge acquisition

Business relatedness between the local supplier and its foreign buyer is also put forward and tested in this study as a determinant of tacit knowledge acquisition. This construct can be explained by evaluating the business relatedness between the local suppliers and their foreign buyers. As clarified earlier in Chapter Two, business relatedness implies that the businesses of supplier and buyer have aspects in common. Similarities in terms of products, technologies, industries, customers and skill bases could pave the way for Malaysian suppliers to attain tacit knowledge through international outsourcing contracts. Business familiarity will provide the local supplier with some basic information about the foreign buyer's business background. This should be an advantage

to the supplier since it can use such information as prior knowledge, which is an important aspect of recognizing and absorbing new external tacit knowledge (Thuc Anh et al. 2006). Business similarities will also mean that they share business jargon, language and concepts with their buyers, which means they may able to recognize and effectively acquire valuable tacit knowledge more quickly from their buyers. Thus, business relatedness is expected to be positively associated with the local suppliers' tacit knowledge acquisition.

The results from Chapter Four indicated that business relatedness between partners has a positive and significant impact on the supplier's tacit knowledge acquisition. This significant finding is consistent with those of previous related research established by Lyles et al. (2000) and Thuc Anh et al. (2006), who found support for the connection between business relatedness and interorganizational learning. It contributes to the understanding that having a similar business to its foreign buyer could facilitate faster the local supplier's acquisition of tacit knowledge through international outsourcing relationships. When its business is related to that of its foreign buyer, a Malaysian supplier will find it easier to identify valuable and new tacit knowledge that can be acquired from its foreign buyer. This is because the supplier will already have a good knowledge foundation and a basic idea of its partner's business, such as products and technology involved, which should aid the knowledge acquisition process (Darr and Kurtzberg 2000; Knudsen 2007). The significant relationship between business relatedness and tacit knowledge acquisition found in this study proved that partner similarity is a potential booster for appropriating tacit knowledge (Saxton 1997).

On the other hand, differences between the local suppliers and their foreign buyers could inhibit learning between partners (Inkpen 2005). If a Malaysian supplier's business has little or nothing in common with that of its foreign buyer, the acquisition of tacit knowledge would very likely be slower and more complicated since the supplier would be unfamiliar with the new tacit knowledge and its potential. As argued by Inkpen and Pien (2006) in their article on knowledge transfer in a cross-border collaborative relationship between China and Singapore, it is rather tricky to learn unrelated knowledge because of the acquirer's difficulty in fully comprehending the situation. Certain knowledge may be perceived as less important, and thus, its acquisition and application could be considered trivial or tedious.

5.2.1.3 Interactive involvement and tacit knowledge acquisition

It has been shown in this study that interactive involvement has a strong and significant influence on the acquisition of tacit knowledge by Malaysian suppliers. The results show that this factor is the strongest predictor of absorptive capacity that is associated with the supplier's tacit knowledge acquisition. Moreover, it is interesting to note that interactive involvement proves to be the strongest predictor of tacit knowledge acquisition out of all the constructs in both the absorptive capacity and relational capital dimensions. Thus, the current study provides empirical evidence that the many ways of interactive involvement are the most critical elements in the acquisition of tacit knowledge by Malaysian manufacturing suppliers.

These findings support prior arguments that since tacit knowledge is difficult to codify and transfer (Cavusgil et al. 2003; Modi and Mabert 2007), its acquisition can best be achieved through observation (Grant 1996a; Zollo and Winter 2002), apprenticeships (Spekman et al. 2002) and joint participation (Thuc Anh et al. 2006). Several of the interactive involvement listed by Inkpen and Dinur (1998), such as training, site visits, joint problem solving and technology sharing, are implemented by or accessible to the Malaysian suppliers through their outsourcing contracts with foreign clients. The data gathered in this research reveals that the supplier's tacit knowledge acquisition is determined to a large extent by the use of a combination of learning methods involving interactive participation from both sides. This makes sense since joint activities are the best way for the Malaysian suppliers to encourage interaction and personal involvement, which have been argued to assist the process of sharing and acquiring tacit knowledge (Kale and Singh 2007; Kim 1997).

During an interview session with one of the experts, who helped to review and improve the questionnaire items, it was noted that the automotive supplier for which he was the factory manager acquired tacit knowledge from its Norwegian car-manufacturer through trouble shooting and problem solving, involving both partners. The company, a Malaysian automotive parts and components supplier, which manufactures and specializes in automotive suspension systems, has signed an outsourcing contract with the Norwegian automaker to supply it with its system. After fitting the system into its cars in Norway, the buyer provided the Malaysian supplier with evaluations, comments and feedback regarding improvements that could be made. Based on this information, in

combination with its own ideas and initiative, the local supplier was able to develop an improved version of its previous suspension system.

The expert also described teleconferencing sessions that took place between the partners to discuss ideas and issues that needed immediate attention. In addition to this long distance involvement, on numerous occasions the Norwegian engineers visited the local supplier's facilities to review the project's progress, discuss solutions to problems and to team up to improve the product and production processes. According to the expert, all these joint activities helped the company to learn tacit knowledge from the Norwegian buyer. The new tacit knowledge gained through the outsourcing relationship had been applied by this automotive supplier to enhance existing products, develop new designs, and increase its overall manufacturing competency. The information gathered from this interview also indicated the importance of practical experience and direct contact (Athanassiou and Nigh 2000), achieved through the involvement of both partners in various knowledge acquisition channels, such as training, meetings and joint problem-solving.

The critical need for learning mechanisms in the context of the Malaysian suppliers and their foreign buyers is due to the intricate features of tacit knowledge itself, which is difficult to acquire or transfer through written forms. Thus, interactive involvement seems to facilitate its transmission from the foreign buyers to the Malaysian suppliers through their collaborations. This may be another reason why the construct of prior related knowledge was deemed negative and insignificant by the Malaysian suppliers.

The fact that prior related knowledge is not a critical source of absorptive capacity could be related to the fact that the interactive involvement is more important than prior related knowledge. The latter could be more significant in the acquisition of explicit knowledge, which does not necessarily require interaction between partners as it can be achieved through books, formulas or manuals (Koskinen and Vanharanta 2002; Nonaka et al. 2000b).

5.2.2 Relational capital and tacit knowledge acquisition

Relational capital has been argued to be one of the key facilitators of learning and knowledge exchange between partners (Dyer and Singh 1998; Kale et al. 2000; Yli-Renko et al. 2001). In this study, relational capital is viewed as the relationships developed through socialization and empathy between the Malaysian suppliers and their foreign buyers. It is believed that the establishment of relational capital could assist the flow of tacit knowledge from the transferors to the acquirers (Cavusgil et al. 2003; Inkpen and Tsang 2005b). This is because the learning of unwritten knowledge needs to go hand-in-hand with the interactive participation and involvement of both partners in order for the local suppliers to fully understand and absorb it from their foreign partners. As a result, socialization combined with the willingness and obligation to transfer the tacit knowledge can facilitate the process.

In this study, relational capital is assumed to be composed of three major predictors that are relevant to tacit knowledge acquisition through international outsourcing relationships. It is hypothesized that trust, interaction and cultural sensitivity may help

the Malaysian suppliers to acquire sticky and uncodified aspects of knowledge from their overseas outsourcing clients. The relationships between these predictors and tacit knowledge acquisition are presented in Hypotheses $H4_a$, $H5_a$ and $H6_a$. Similar to the case for absorptive capacity described above, out of these three relational capital elements, only interaction and cultural sensitivity are found to be positively significant terms of the acquisition of tacit knowledge. Surprisingly, trust, which is commonly-cited predictor of relational capital, is not found to be significant in the context of tacit knowledge acquisition by the Malaysian suppliers.

5.2.2.1 Trust and tacit knowledge acquisition

One of the most striking results in this study is that regarding the effect of trust on the suppliers' tacit knowledge acquisition. As described in previous chapters, trust represents the supplier's perception of its own and its buyer's credibility and benevolence with regards the outsourcing relationship. In this study, trust was predicted to be positively related to the Malaysian suppliers' acquisition of tacit knowledge through international outsourcing relationships. The relevant hypothesis was formulated based on the contentions that trust benefits the development of relational capital in interfirm business relationships (Cousins et al. 2006; Kale et al. 2000; Kuo-Hsiung and Gotcher 2008) and enables partners to willingly share tacit knowledge (Becerra et al. 2008; Inkpen and Dinur 1998; Levin and Cross 2004). Based on the PLS results, however, trust turns out to be unrelated to tacit knowledge acquisition by the Malaysian manufacturing suppliers. Despite many arguments to the contrary, the impact of trust on tacit knowledge acquisition is not significant in this study. This result is consistent with

the findings of Lane et al. (2001) and Lyles at al. (2000), who stated that trust is not directly associated with the learning process between partners. However, their studies investigated general knowledge acquisition in IJVs, while the current study is centered around tacit knowledge acquisition in contractual international business collaborations.

One plausible explanation for the current study's finding that trust does not motivate the learning of tacit knowledge may be that the acquisition of tacit knowledge entails different procedures and courses of action than of explicit knowledge (Lane et al. 2001). This is particularly relevant when the learning of this complicated knowledge is taking place in a non-equity agreement, such as an international outsourcing relationship between a buyer and supplier from different countries. According to Das and Teng (1998), because the partners are not obliged to provide any equity investment in non-equity forms of business relationships, confidence and trust are likely to be much lower than in equity-based collaborations, which are usually governed by contracts that spell out the expectations of each partner. As a result, the Malaysian suppliers may not rely greatly on trust to help them learn new valuable tacit knowledge while working and interacting with their foreign buyers.

Instead, fulfilling the foreign buyers' high standards and product requirements is actually more important in facilitating the Malaysian suppliers' acquisition of tacit knowledge in international outsourcing. In order to comply with such standards, the Malaysian suppliers will likely be granted access to their foreign partners' knowledge, skills and technology. This access provides them with the opportunity to learn-by-doing and to

receive training, which are among the most effective mechanisms for the acquisition of tacit knowledge. When valuable knowledge and information are transferred, the Malaysian suppliers are able to take advantage of this spillover effect to learn from their foreign counterparts, particularly about how to produce better and reliable quality products. The high standards and requirements set by the foreign buyers will put intense pressure on the Malaysian suppliers to perform at the expected level. As for the foreign buyers, in their effort to gain efficiency and sustain competitiveness, they have to provide the Malaysian suppliers with technical assistance and ideas so that the components and products they receive meet their standards, in terms of reliability, quality and speed of delivery. Based on the above, it seems likely that the tacit element of foreign buyers' knowledge, technology or production processes will eventually be transferred by the buyers to the Malaysian suppliers even without the presence of trust.

The lack of a link between trust and tacit knowledge acquisition may also indicate that in international collaborations between the Malaysian suppliers and their foreign buyers, the effect of physical distance may also explain why trust is not related in the acquisition of tacit knowledge by the supplier. Since these partners are located in different cross-border locations, their business relationships are not likely to be characterized by much trust. Furthermore, the fact that they are separated by long distances minimizes the risk of partner engaging in opportunistic behaviors, reducing the need for trust. Even though there are many conceptual assertions that highlight the relevance of trust in the interorganizational learning of tacit knowledge (Becerra et al. 2008; Collins and Hitt 2006; Janowicz-Panjaitan and Noorderhaven 2009), this relational factor is not

particularly critical in international outsourcing partnerships, as viewed from the perspective of the Malaysian manufacturing suppliers. Therefore, despite the arguments that trust could facilitate interorganizational learning, a high level of trust may not be required in the context studied here.

On the other hand, Becerra et al. (2008) and Dhanaraj et al. (2004), who categorize knowledge into explicit and tacit, both found trust to be a significant predictor of tacit knowledge exchange between partners, but not of explicit knowledge exchange. Specifically, Dhanaraj et al. (2004) provided evidence that trust and relational embeddedness are important in expediting the learning of tacit knowledge from partners. Li et al (2010) reported a slightly different finding, discovering that trust is related to the acquisition of both tacit and explicit knowledge, although more significantly so in the case of tacit knowledge. Although these studies revealed a positive link between trust and tacit knowledge, their approach was somewhat dictated by the classification of knowledge into tacit and explicit knowledge. The current study meanwhile looks solely at the acquisition of tacit knowledge, which may alter the results.

5.2.2.2 Interaction and tacit knowledge acquisition

Interaction, meanwhile, turns out to be one of the most important relational capital predictors in terms of determining the acquisition of tacit knowledge by the Malaysian suppliers. The significant connection between interaction and the acquisition of tacit knowledge is probably related to the high significant impact of interactive involvement mentioned earlier. In Chapter Four, interactive involvement is identified as the most

crucial of the absorptive capacity dimension, in terms of positively affecting the knowledge flow between the foreign buyers and their Malaysian suppliers. Since interactive involvement consists of several learning activities entailing the participation of both partners, such processes are likely to result in interaction and communication between the Malaysian manufacturing suppliers and their foreign buyers.

The significant effect of interaction on the suppliers' tacit knowledge acquisition is consistent with the findings of previous research (Puhakka 2006; Yli-Renko et al. 2001), showing that interaction between firms is positively associated with knowledge acquisition. Although that research was more related to general knowledge, the basic idea is still supported in that tacit elements can be found in the composition of general knowledge. The current study's finding is also similar to that of Liu et al. (2009), who prove in their study of strategic alliances that interaction affects the learning process between Taiwanese IT suppliers and their foreign MNC clients. It also concurs with a case study conducted by Collins and Hitt (2006). In their investigation into relational capital and tacit knowledge transfer, they recognize that interaction, which helps to build relational capital, facilitates the process of tacit knowledge transfer between partners.

During a short interview as part of an expert review session with a product engineer of a Malaysian oleochemical company, she highlighted that her company's foreign buyer would occasionally send its managers to train the local managers for a period of time. The purpose was to make sure that the product manufactured by the Malaysian supplier met the standards expected by the foreign buyer. She added that, when both managers

worked together, two-way communications and interactions took place, particularly when they were attempting to find the best way of improving the product or production processes for the benefit of the outsourcing project. These interactions naturally present good opportunities for the local managers to learn tacit knowledge from their foreign counterparts because the managers can interact face-to-face, something that has been found to be important for the acquisition of tacit knowledge (Hau and Evangelista 2007; Lane and Lubatkin 1998). These face-to-face interactions were also used as channels to obtain immediate feedback if the tacit knowledge was not fully comprehended in the first instance (Koskinen and Vanharanta 2002).

This particular finding of the study also supports of the conceptual arguments laid out in the previous chapter stating that interaction plays a notable role in the acquisition of tacit knowledge (Eng 2005; Gertler 2003). Furthermore, they are in line with the assertion that tacit knowledge may be obtained not only through direct and close interactions (Grant 1996a; Nooteboom 2000), but also through partner socialization (Nonaka and Takeuchi 1995). From the perspective of the Malaysian suppliers, interaction is found to be slightly more important than the other relational capital elements identified in this study. Since tacit knowledge is embedded in action, commitment and involvement (Nonaka 1994), its possession is greater when its acquisition is supported by communication and joint activities between supplier and buyer (Thuc Anh et al. 2006). These methods may ease the learning process as the suppliers can make use of activities carried out in the presence and with the participation of their foreign buyers.

5.2.2.3 Cultural sensitivity and tacit knowledge acquisition

Based on the result of the PLS analysis, cultural sensitivity is also found to play a significant role in determining the Malaysian suppliers' acquisition of tacit knowledge through the outsourcing projects. This proves that the local suppliers have sufficient sensitivity towards their foreign buyers' national business cultures, enabling them to strengthen their relationships with them and further facilitate tacit knowledge acquisition. In other words, the Malaysian suppliers appear to be aware of the differences between their own national business culture and those of their foreign buyers. Furthermore, they are willing to make some adaptations in the way they manage these cultural gaps identified during their outsourcing relationship. As such, the suppliers begin to adjust their ways of doing business so as to stay in line with their foreign partners' national business cultures and environments. Their willingness to adapt to cultural differences helps to reduce cultural conflict and build and improve on relational capital. This relationship factor has been empirically verified as being critical to the learning of tacit knowledge (Dhanaraj et al. 2004) and to interfirm cooperative performance, in terms of strength, stability and knowledge acquisition (Lee and Cavusgil 2006).

This finding is consistent with a related study of Voss et al. (2006), who state that cultural sensitivity is positively associated with the exchange of high-quality information in cross-border partnerships. They describe how the exchange of such information could encourage partners to strive harder in a dynamic market and thus stay competitive. This explanation matches the description of the role played by tacit knowledge, partly

because this sticky knowledge has been consistently emphasized as being a valuable factor in a firm's survival and competitive advantage. It is believed that the exchange of high-quality information also includes the transfer and acquisition of tacit knowledge between partners from different cultural backgrounds. Therefore, in the context of the outsourcing relationship between the Malaysian suppliers and their foreign buyers, the acquirer needs to be culturally sensitive so that the buyers feel comfortable with the business relationship, and thus do not hesitate to transfer the tacit component of their knowledge to the local suppliers. As Voss et al. (2006) reasoned, quality information, such as tacit knowledge, will be passed on if the partner shows signs of empathy and openness towards one's business culture.

5.2.3 Relational capital and opportunity recognition

The consequences of relational capital for the Malaysian suppliers' opportunity recognition were expressed and investigated in terms of the relationships between the three aforementioned elements of relational capital elements (trust, interaction and cultural sensitivity) and the business opportunities that arise for the suppliers. The relationships predicted the actual and potential benefits gained from business relationships nurtured through these relational aspects. As Kanter (1994) pointed out in her article on collaborative advantage, business relationships developed through collaborations act as prospects and alternatives for the future, opening new doors and previously unforeseen opportunities. In some instances, relational capital has been shown to help the partners involved to discover commercial opportunities based on new valuable resources and business networks (Ireland et al. 2002). For example, the

outsourcing relationships between the Malaysian suppliers and their foreign buyers provide them with the opportunity to make personal contacts through the foreign buyers' networks (Chow and Chan 2008).

In the current study, opportunity recognition is described as the discovery of a new means to create potential new businesses or the prospects of enhancing the current business position and profits. It is critical for the Malaysian suppliers to develop good relational capital with their foreign buyers in order to discover such opportunities, as business networks and external knowledge. As emphasized by Uzzi (1997), the relational embeddedness of exchange partners can facilitate the creation of economic opportunities. Based on these arguments, the implications of the relational capital indicators for the local suppliers' opportunity recognition are hypothesized as H_{4b}, H_{5b} and H_{6b}. Of the three indicators, only trust and interaction are observed to have a significant effect on the Malaysian suppliers' opportunity recognition. Cultural sensitivity seems to be less crucial for the recognition of business opportunities.

5.2.3.1 Trust and opportunity recognition

Trust has been argued to be one of the most influential elements in the development of relational capital, which is thought in turn to result in the identification of business opportunities. As predicted, the association between trust and opportunity recognition is found to be positively significant from the perspective of the Malaysian manufacturing suppliers in the context of international outsourcing relationships. The significance of trust for the recognition of supplier opportunities found in this study partly complement

the finding by Doney and Cannon (1997) in their article on trust and buyer-supplier relationships. They found trust to be an essential influence on a buyer's intention to collaborate again with the same supplier on future outsourcing projects. This finding is also in line with the contention of Pisano et al. (2007) and Wilson and Nielson (2001) who investigate strategic relationships, and argue that trust is one of the requirements for the continuity of such business partnership. Thus, there is a potential opportunity that a buyer would collaborate with the same supplier again in future projects if the supplier can prove its reliability and ability in meeting the buyer's business and relationship expectations.

The result of the relationship between trust and supplier opportunity recognition in this study is consistent with previous contentions that trust in business relationships helps partners to generate opportunities (Hyder and Ghauri 2000) and gain access to resources (Uzzi 1997). To some extent, it also confirms other scholars' arguments that trust leads to a partner's willingness to share important inputs and information (Doney and Cannon 1997; Mohr and Spekman 1994). These inputs could be handed down to the Malaysian suppliers in the form of tacit knowledge, advice or consultation at no cost, on the basis of trusted relationships. Receiving critical and up-to-date information on product, manufacturing and technological developments could result in changes to the supplier's overall production and business strategy. Thus, the Malaysian supplier enjoys promising opportunities as a result of doing business with their foreign buyers in a trustworthy manner.

The importance of trust is also reflected here in the fact that the suppliers feel their foreign buyers have provided them with inputs on market activities and industry updates because they trust them. These opportunities are certainly valuable in helping the suppliers to improve their overall performance and competitiveness. A good rapport will also be extremely useful in helping the Malaysian suppliers to receive more business opportunities through their existing outsourcing relationship since only a credible supplier is likely to gain a customer's trust to such an extent that they will be referred to other potential business clients in the foreign buyer's extended relationships and business networks (Kale et al. 2000). Such referrals could thus increase the local supplier's recognition of forthcoming opportunities (Pisano et al. 2007), such as access to various new developments and foreign markets (Lianxi et al. 2007).

5.2.3.2 Interaction and opportunity recognition

The statistical analysis in Chapter Five indicates that, as predicted, the significant connection does exist between interaction and opportunity recognition. When direct and indirect interactions take place regularly between the local supplier and its foreign buyer, the relational capital developed from these activities will increase supplier's ability to discover potential opportunities through its international outsourcing relationship. Regular interaction is one of the ways of establishing close business relationship. The resulting intimate attachment may encourage the foreign buyer to share ideas and necessary resources with its Malaysian supplier (Chow and Chan 2008). Indeed, it has been asserted in a previous article on international outsourcing relationships that interaction will lead to the creation of resource exchange opportunities between the

outsourcees and their international outsourcers (Kuo-Hsiung and Gotcher 2008). To a certain extent, the significant effect of interaction on the supplier's opportunity recognition is consistent with the finding of Yli-Renko et al. (2001), who reveal that interaction between firms is associated with new product development and technological distinctiveness. Although their investigation is more related to social interaction, the basic idea is still supported by the fact that the firms interact with each other, and this contribute to the development of opportunities. In fact, the result also confirms the contention by Johanson and Vahlne (2006) that interactions between business partners not only help in the creation of new business ideas, but also help in the recognition of ideas for improving the existing business. From the network perspective, the result is in line with Eng's (2005) argument that potential opportunities and beneficial outcomes, such as the transfer of technology or quality enhancement, may be discovered through the interactions between firms. Thus, in this context, interaction seems to offer opportunities for Malaysian suppliers to learn about their foreign buyers' manufacturing developments, which may later be applied to the suppliers' production processes.

5.2.3.3 Cultural sensitivity and opportunity recognition

Although this thesis predicted that cultural sensitivity would have a positive and significant effect on the supplier's opportunity recognition, the results of the analysis indicate that the relationship between these two constructs is not particularly significant. This unexpected result implies that from the Malaysian supplier's point of view, cultural sensitivity is not critical in obtaining the best potential opportunities from the international outsourcing relationship. It is possible that the local suppliers do not need

to demonstrate cultural sensitivity in order to identify promising opportunities from their business relationships with foreign buyers. Opportunity recognition by the supplier may be done in an informal and imperceptible way, such as during interaction or socialization between the partners.

Thus, the suppliers are of the opinion that, regardless of whether they are culturally sensitive or incompetent in this regard, the foreign buyers will eventually share their ideas, business contacts and market information with the Malaysian suppliers in exchange for having a good business relationship. Another plausible reason is that perhaps cultural sensitivity may not be required when it comes to discovering potential opportunities in international buyer-supplier collaboration because the foreign buyers may feel that passing opportunities to the Malaysian suppliers is unlikely to jeopardize their competitive advantage.

5.2.4 Tacit knowledge acquisition and capability enhancement

As stated earlier in this thesis, capability enhancement is defined as a supplier's ability to effectively integrate internal and external knowledge and competencies in its effort to grow, survive and keep pace with the changing business environment. In order to achieve the expected capability level and secure the company's competitive position locally and globally, the acquisition of new knowledge, particularly tacit knowledge, from external sources is crucial, especially during volatile times. This study sought to determine whether the acquisition of tacit knowledge actually enhances the Malaysian suppliers' capabilities. As shown in Figure 5.1, the results do indeed show a significant

and positive influence of the tacit knowledge acquired on the supplier's capability enhancement. This effect could be linked to the value of tacit knowledge, which is widely argued to be a source of a company's competitive advantage (Ambrosini and Bowman 2001; Cavusgil et al. 2003; Kogut and Zander 1993).

The significant influence of tacit knowledge on the Malaysian suppliers' capabilities is consistent with prior theoretical contentions that the acquisition of tacit knowledge enhances a company's capability (Dhanaraj et al. 2004). To some extent, the finding is empirically in tune with the findings of previous related empirical studies. For instance, Subramaniam and Venkatraman (2001) proved that the transmission of tacit knowledge can enhance the development of new product capabilities, while Cavusgil et al. (2003) verified that a firm's innovation capability could be improved through the acquisition of tacit knowledge from an outside source. Thus, it appears that the tacit knowledge learned from their foreign buyers may eventually increase the Malaysian suppliers' capability to innovate, develop new products and respond to customer needs or market demands. This is important for Malaysian suppliers hoping to increase their competitiveness and position themselves among other global manufacturing suppliers (Agus and Abdullah 2000). A partnership with a foreign buyer may thus be seen as an opportunity to obtain new tacit knowledge for the purpose of increasing the local supplier's competency.

5.2.5 Tacit knowledge acquisition and opportunity recognition

This study also finds a significant and positive relationship between tacit knowledge acquired through international outsourcing collaborations and the Malaysian supplier's opportunity recognition. This is probably because, when the local suppliers learn new tacit knowledge from the foreign clients, their tacit knowledge stock accumulates and they find it easier to identify, comprehend and manage these opportunities. Put differently, the tacit knowledge generated from their international outsourcing partnerships helps the suppliers to see things better and grasp any potential prospects effectively.

The findings provide partial support for Subramaniam and Venkatraman's (2001) argument that newly acquired tacit knowledge about a foreign culture can provide important information that is critical in understanding the foreign market and coping with its consumers' needs, thus leading to promising opportunities. As they put it, the acquired tacit knowledge can transform 'idiosyncratic experiences and interpretations into unique market opportunities' (Subramaniam and Venkatraman 2001, p.362). Since the accumulation of tacit knowledge is proven to be so useful in recognizing future opportunities, which may include some that are pivotal to sustaining or increasing a firm's competitive position, all Malaysian manufacturing suppliers would be advised to put more emphasis on acquiring tacit knowledge from outsourcing partnerships with foreign buyers.

5.2.6 Capability enhancement and opportunity recognition

The results of this study demonstrate that the Malaysian suppliers' capability enhancement significantly influences their ability to discover upcoming opportunities. This is a new and previously unexplored relationship, and implies that the better are the local supplier's capabilities, the more opportunities it will identify from its international outsourcing relationships with a foreign buyer. One possible explanation for this is that, with enhanced capabilities, the suppliers will be better at recognizing possible opportunities, and will use their skills to effectively seek out ways and strategies of improving their overall performance. As the Malaysian suppliers enhance their capabilities, their expertise and judgment will also be positively affected, enabling them to spot new opportunities and distinguish those that can be used to improve their competitive advantage.

Since tacit knowledge acquisition influences the supplier's opportunity recognition and capability enhancement, this may explain why the supplier's capability enhancement is related to their opportunity recognition. The acquisition of tacit knowledge and improved capabilities both increase the supplier's ability to discover new opportunities because it is both more knowledgeable and more competent, allowing it to recognize and act quickly on potential opportunities emerging from such business relationship. In addition, capability enhancement will create a good reputation for the local supplier, so that more foreign clients may be interested in collaborating with them on future international outsourcing projects.

CHAPTER SIX

CONCLUSION

6.1 Introduction

This chapter discusses several research implications, the research limitations and ideas for future research. In the first and second sections, the theoretical and managerial research implications will be discussed. Then, the limitation section will focus on some of the specific issues relating to this study. The last section will provide a few recommendations for strategic directions that can be taken in future studies.

6.2 Theoretical Implications

To date, the topic of knowledge acquisition or transfer in the international business context is commonly been researched from the perspective of the IJV (Dhanaraj et al. 2004; Hau and Evangelista 2007; Lyles and Salk 1996; Yin and Bao 2006). With the exception of Yin and Bao (2006), who examine the acquisition of tacit knowledge in China, most of these researchers target general knowledge or classify it into two separate knowledge categories - tacit knowledge and explicit knowledge. Few studies have been exclusively dedicated to exploring tacit knowledge acquisition in an international business setting, particularly from the international outsourcing context. Furthermore, most interorganizational knowledge acquisition investigations come from the perspective of the knowledge transferor rather than the knowledge acquirer. Since past international business research has paid limited attention to this type of knowledge in this form of international business relationship, this study attempts to fill the gap. It

should also be noted that, despite ASEAN's increasing importance as an attractive destination for international outsourcing (Murugiah 2011), research on suppliers' knowledge acquisition, particularly tacit knowledge, and its impact on the suppliers' performance outcomes in the ASEAN region is still lacking. This study is among the earliest efforts to provide empirical evidence regarding the process of tacit knowledge acquisition via international outsourcing from the standpoint of the ASEAN's knowledge acquirers, in this case is the Malaysian manufacturing suppliers.

From the theoretical perspective, this study extends both international business and knowledge management literatures by linking tacit knowledge acquisition to absorptive capacity, relational capital and the international supplier's performance outcomes. The establishment of these linkages helps to explain how tacit knowledge is obtained through international business relationships and the effects this acquisition has on Malaysian suppliers' capabilities and future opportunities. It should also be highlighted that some of these linkages have never been studied before in research into interfirm knowledge acquisition or transfer in an international business context. For instance, the relationships between tacit knowledge acquisition and its determinants, such as prior related knowledge, interactive involvement, interaction and cultural sensitivity, are established in this study to address some of the unexplored issues in the area of tacit knowledge learning and the buyer-supplier partnership. The same situation is true for the relationships between tacit knowledge, capability enhancement and opportunity recognition. Therefore, the current study aims to set a foundation for future research on tacit knowledge management in international buyer-supplier relationships.

Another theoretical contribution of this study comes from its effort to analyze two different outcomes of tacit knowledge acquisition. In contrast, other similar research has commonly assessed the impact based on a single performance factor, such as IJV performance (Dhanaraj et al. 2004; Lyles et al. 2000; Lyles and Salk 1996; Thuc Anh et al. 2006), the knowledge recipient's performance (Yin and Bao 2006) or the alliance's performance (Becerra et al. 2008). In the case of the present study, however, the tacit knowledge learned from the foreign buyers is evaluated according to other performance effects on the Malaysian suppliers, namely their capability enhancement and opportunity recognition. Interestingly, the results show that these two aspects are, in fact, positively influenced by the suppliers' acquisition of tacit knowledge through their outsourcing relationships with foreign buyers. This particular finding highlights the need for Malaysian suppliers to acquire tacit knowledge while carrying out international outsourcing contracts.

Regarding the determinants of tacit knowledge acquisition in international outsourcing relationships, the current study contributes to the growing literature on the influence of absorptive capacity and relational capital in the acquisition of tacit knowledge by international suppliers. The findings of this study suggest that not all factors of absorptive capacity and relational capital are critical to this process. In the case of absorptive capacity, interactive involvement is shown to strongly influence the process of tacit knowledge acquisition, while prior related knowledge appears to be not significant. Thus, what matters most is the mode of interactive learning, such as training programs and problem solving between partners, as these appear to create the best

situation in which to learn new tacit knowledge from a foreign outsourcing partner. As such, regardless of the supplier's competency level, tacit knowledge can be absorbed through various learning methods, though interactive participation and joint actions appear to be paramount.

In reference to relational capital, unexpected results were obtained. While trust has previously been proven crucial to the learning process between IJV partners, this relationship factor appears not to be critical to the acquisition of tacit knowledge through the type of international cooperation studied here, in which the partners do not make any type of equity commitment. Nevertheless, trust does prove to be an important in the supplier's opportunity recognition. In contrast, outsourcing suppliers would be advised to be sensitive to and tolerant of their foreign buyers' national business culture since this is found to be relevant to the acquisition of tacit knowledge although not to opportunity recognition. As for interaction, it is found to be one of the most significant influences on a Malaysian supplier's tacit knowledge acquisition, as well as being vital to the recognition of opportunities from its foreign partners. Finally, the findings of this study have shown the actual benefits of tacit knowledge acquisitions of enhancing the supplier's competency and opportunities. Specifically, the new tacit knowledge learnt during international outsourcing projects improves the supplier's capabilities, indicating that the knowledge is applied to and integrated into existing operational routines and business practices. Due to this internalization, the supplier's capabilities are strengthened to the extent that it is able to innovate, predict possible business environment crises and respond to market changes. The outcome of this capability enhancement is a sustainable

competitive advantage. In addition, the possession of external tacit knowledge and improved competencies provide the suppliers with the ability to recognize potential opportunities that are crucial to business growth. Given these arguments, this study contributes to the resource-based view and the knowledge-based view by proving that tacit knowledge is indeed a valuable and strategic resource that can lead to the development of a competitive advantage.

6.3 Managerial Implications

The findings of this study provide several managerial implications. First, the Malaysian suppliers should be aware of certain circumstances and efforts they can make to ensure that their international outsourcing relationships are successful. Even though the supplier's main agenda in the international outsourcing relationship should be to deliver the components or products as expected by its foreign buyer, it can also gain other important strategic benefits from the partnership. The findings reveal that, as well as carrying out the outsourcing contracts, the Malaysian suppliers can also use the opportunity to learn new and valuable tacit knowledge this business collaboration. Most importantly, as the tacit knowledge is assimilated and utilized, it provides great value to the suppliers, enhancing their capabilities and providing opportunities. In order to profit from these findings, the Malaysian suppliers should give their managers and engineers more information about what tacit knowledge really means, emphasizing its strategic importance in terms of future growth and business profits. It is especially important that the managers, who are directly involved with the foreign buyers, understand its value so that they will be motivated to put serious effort into absorbing as much as possible, and

disseminate it within the firm. As noted earlier in the literature review chapter, the successful acquisition of tacit knowledge through international outsourcing depends on those employees, who work, interact and socialize with their foreign counterparts.

In the context of the supplier's absorptive capacity, this research provides evidence that interactive involvement is vital for the acquisition of tacit knowledge. Due to the distance between the partners and the abstract nature of tacit knowledge, it seems that interactive involvement is more important than other absorptive capacity indicators, such as prior related knowledge and business relatedness, when it comes to acquiring this complicated knowledge from international outsourcing partners. Unlike the learning of explicit knowledge, which largely relies on manuscripts or procedures, the acquisition of tacit knowledge requires practical, interactive and face-to-face learning. Therefore, the Malaysian suppliers should plan programs that require the attendance of employees from both parties in order to fully capture potential tacit knowledge during their meetings. For example, they should ask their buyers to give them feedback on how they might improve the skills or processes used to produce their components. This should help the suppliers to learn tacit knowledge and so increase their competency. Tacit knowledge has been shown to be learnt best through observation, experience, partner participation or learning-by-doing. Thus, the supplier could ask their foreign buyers to arrange and participate in joint activities, such as training, site visits or joint problem solving that would allow the suppliers to observe the buyers' processes and system.

Another major finding of this study is that certain relational capital elements are connected with the acquisition of tacit knowledge. It was found that of the three relationship factors studied, only interaction and cultural sensitivity significantly facilitate the suppliers' tacit knowledge acquisition. Trust, widely argued to be critical, turns out to be unimportant in this context. Overall, it is interaction that emerges as the most crucial aspect of relational capital in terms of aiding tacit knowledge flows. From the Malaysian manufacturing suppliers' point of view, external tacit knowledge is easily obtained through various ways of interaction, such as discussions on how to improve product quality, getting feedback about their outsourcing performance and sharing information on the latest production techniques and technological updates. Furthermore, interaction also appears at the centre of the suppliers' opportunity recognition. The Malaysian suppliers are more likely to recognize potential opportunities from their international outsourcing contracts if both partners involved engage in formal or informal interactions.

This relational capital dimension provides the opportunity for socialization and communication between the two, leading to the establishment of a comfortable, connected and friendly atmosphere that encourages the foreign buyer to share any inputs or leads on business opportunities and transfer tacit knowledge to the local supplier. Based on this revelation, firms should bear in mind that even though interaction between partners from different countries might face severe challenges due to different national business cultures and geographic locations, they must find ways to make adjustments in order to encourage interaction between partners. Firms should take advantage of this

activity to strengthen their relationships as better quality relationships are more likely to lead to benefits such as gaining valuable knowledge, improving business performance, getting new business contacts and gaining access to cheaper resources.

6.4 Limitations

As with most studies, this research has some limitations and the findings should be evaluated cautiously in the light of these limitations. Perhaps the greatest drawback concerns the description of tacit knowledge itself. As mentioned in earlier chapters, tacit knowledge is complicated in nature and difficult to identify. What is more, the concept is probably relatively unknown in Malaysia to those outside the academic circle, especially as there is no available translation of 'tacit knowledge' in the country's main language. Even in a study conducted in the USA about tacit knowledge transfer in project and product management, Foos et al. (2006) reveal that the content and process of tacit knowledge transfer was not accurately comprehended by the respondents, even among project and product managers. Thus, in the current study, although a definition of tacit knowledge was highlighted in the cover letter and the questionnaire, there is still a possibility that the term tacit knowledge was unfamiliar to some of the respondents, so they may have not understood the whole concept and its implications. Providing a clearer explanation of tacit knowledge in the questionnaire was undeniably a big challenge. To reduce misconceptions on the part of the respondents, a knowledge management scholar and three industry experts helped to provide a practical description of tacit knowledge acquisition. A few examples of tacit knowledge were added in order to provide the respondents with a clearer picture of such a delicate form of knowledge.

A second limitation of this study concerns the response rate and sample size. The response rate was quite low even though several attempts were made to attract the respondents' attention and encourage participation. In addition, only four significant manufacturing industries were selected and other necessary criteria were then applied. Thus, the eventual sample size was small as it was restricted to only a few Malaysian manufacturing suppliers that met the specific requirements. Thus, generalization of the results is an issue. The results related to Malaysian suppliers from four main manufacturing industries with international outsourcing contracts from foreign clients. However, the findings and conclusion cannot be generalized to the whole of this population because most of the suppliers within the limited sample did not participate in the survey or indicated that they did not gain any tacit knowledge from their foreign affiliates. In fact, even if the response rate had been high, the findings of this study would still not be generalizable to all Malaysian manufacturing suppliers given that the sample was only limited to four manufacturing industries. Therefore, the findings of this study should be interpreted with some caution.

Thirdly, this study examines the acquisition of tacit knowledge from the perspective of just one side of the partnership – the Malaysian manufacturing suppliers. Their points of view might reflect only their own beliefs and judgment, while some of the constructs, such as trust and interaction, should ideally have included the foreign buyers' views as well. There is no way to know whether the foreign buyers actually share the same opinions of the local suppliers. For instance, do learning involvement and cultural sensitivity truly encourage the foreign buyers to pass their tacit knowledge to the

Malaysian suppliers? Therefore, future research should make an attempt to test the model at the dyadic level and confirm whether the results are comparable when suppliers and buyers are surveyed. The data gleaned from a dyadic study would be richer and more appropriate (Cavusgil et al. 2003), particularly for evaluating the determinants and effects of tacit knowledge acquisition in international buyer-supplier relationships. Having perceptions from both sides would make for an interesting comparison in terms of which opinions are shared and which contradictory, and why.

Another limitation of this study has to do with its cross-sectional nature. This method only provides a snapshot of the tacit knowledge acquisition process and does not examine the process over the life-span of an international outsourcing relationship. When acquiring tacit knowledge from a foreign buyer, a Malaysian manufacturing supplier might act differently as the relationship progresses or as the contract comes to an end. Interactive involvement and trust levels between the Malaysian suppliers and their foreign buyers are likely to show significant changes over the years. However, these phenomena are difficult to capture in a cross-sectional study. Moreover, the type of data gathered here does not lend itself to an investigation of cause and effect. Thus, a longitudinal study should be carried out so that the development of tacit knowledge acquisition can be observed over time and its rationalization more strongly justified.

It should also be noted that this study does not include any moderators that could be important in determining the effects of tacit knowledge on a company's performance and future opportunities. Constructs related to external forces, such as environmental

uncertainty or government influence, should be given priority for they have received less attention so far in studies on interfirm tacit knowledge exchange in the international business context. Also, this study does not look into the quality of the relationships between the Malaysian suppliers and their foreign buyers. Future research should attempt to associate the relational capital with relationship quality prior to evaluating the impacts of the relational capital variables on the acquisition of tacit knowledge.

The final limitation of the current study that should be highlighted relates to the measurement items, which may not represent the constructs well enough. This possibility must be acknowledged due to the surprising result regarding the relationship between prior related knowledge and tacit knowledge acquisition, which came out as negative and insignificant. Suppliers' prior related knowledge is intended to reflect their knowledge base and competency, which are felt to be critical for knowledge acquisition or transfer. The result contradicts the positive hypothesis, indicating that the measurement items used may not fully represent the specific prior knowledge and competency that suppliers are likely to rely on in acquiring tacit knowledge. In future, this construct should therefore be refined using pilot studies and a better set of items should be developed that effectively capture the measurement and true meaning of prior related knowledge. Another construct that requires further investigation is business relatedness, which signifies the similarities between the businesses of the Malaysian suppliers and their foreign buyers. When partners involve in the same area of expertise and share common business characteristics, such as products, customers and industries, tacit knowledge acquisition by the local suppliers should be less complicated and they

should be able to identify, comprehend and exploit their partners' tacit knowledge more easily, leading to capability enhancements. Besides similarity, business relatedness is also comprised of a complementarity dimension, which was overlooked in the present study. When Malaysian suppliers and their foreign buyers work in dissimilar but complementary business domains, collaboration synergies allows suppliers to generate new ideas and acquire complementary tacit knowledge and technologies that they are lacking from the buyers. As a result, these suppliers should be able to renew their skills and tacit knowledge base, upgrade their capabilities and widen their business scopes. Future studies should therefore examine business relatedness by combining both similarity and complementarity dimensions in order to determine whether firms actually benefit from working with partners from complementary business areas. Then, the results should be compared with the present results to see whether this approach leads to a different interpretation or provides better justification of the data.

6.5 Future research

Based on the research findings, the limitations and other information gained during the course of this study, several recommendations are made for future studies in addition to the few brief suggestions made in the limitations section above. First of all, other researchers who are interested in further exploring the dynamics and implications of tacit knowledge should combine quantitative data with case studies as this may help to disentangle the complex character of this knowledge. Case studies would be very helpful in providing an explanation of the process of tacit knowledge acquisition in more depth. This may complement the quantitative data, particularly in corroborating the

justifications of the results described here. If a researcher does depend solely on the quantitative method, then the questionnaire should at least provide open-ended questions that capture the extent of the respondents' awareness of the subject of tacit knowledge.

This study examines tacit knowledge acquisition from a general perspective and from the standpoint of manufacturing suppliers. In addition, as detailed in previous chapters, the construct of tacit knowledge acquisition was considered to include all aspects of tacit knowledge and the respondents targeted were drawn from upper level management and from various functional areas. Future research should consider a more specialized tacit knowledge investigation tailored to particular lines of work. For example, the measurement of tacit knowledge acquisition should probably focus on tacit knowledge that is directly related to manufacturing, concerning products, production and innovation. To achieve this new research direction, the respondents should be directly involved in manufacturing activities. In light of the above, the measurements of capability enhancement and opportunity recognition should also be made relevant to manufacturing activities. For example, the capability enhancement could include improving a firm's production processes, R&D and innovation, while opportunity recognition could be related to finding new ways of increasing production and cost efficiency. Finally, the measurement of opportunity recognition measurements should be approached differently. In this study, opportunity recognition is determined by the local supplier's perception of the potential opportunities they have gained from the outsourcing relationship with its foreign buyer. This approach acts as a starting point in connecting the opportunity recognition construct to the knowledge management

theoretical framework. In future studies, this approach should be taken to the next level by looking at the actual opportunities gained as a consequence of relational capital, tacit knowledge acquisition and capability enhancement. Results so obtained may be different. Furthermore, they may be more precise and even undisputable.

6.6 Overall conclusion

In general, this study has met its objectives in investigating firstly whether the international outsourcing relationship is accompanied by the acquisition of tacit knowledge by the local manufacturing suppliers, secondly which key determinants influence the acquisition of tacit knowledge and thirdly how that knowledge affects the Malaysian suppliers' capabilities and recognition of opportunities. Additionally, the empirical evidence and findings have contributed a great deal in answering all the four research questions regarding how the Malaysian suppliers obtain new and valuable tacit knowledge from their foreign buyers while at the same time fulfilling their international outsourcing obligations and the implications of this for to their future development. A summary of the research questions, the research objectives and the empirical findings can be found in Table 6.1. Basically, the findings reveal that the acquisition of tacit knowledge and its impact on a firm's performance outcomes are not only theoretically concepts, but also realistically important in practice for the Malaysian manufacturing suppliers in their effort to compete with other global players. As predicted by various scholars concerning the strategic value of tacit knowledge to a company's competitive advantage, the current study confirms that the flow of tacit knowledge from the foreign buyers to the Malaysian manufacturing suppliers does actually take place and helps the

suppliers to improving their capabilities and discover more potential opportunities and enhance their competitiveness.

Table 6.1 Research Questions, Objectives and Findings

Research Questions	Research Objectives	Findings
Is the tacit knowledge of the foreign buyers' requirements being acquired by the Malaysian suppliers?	To identify whether the Malaysian suppliers are able to acquire tacit knowledge while fulfilling the outsourcing obligations for their foreign buyers.	The Malaysian manufacturing suppliers do actually acquire tacit knowledge from their foreign buyers while carrying out international outsourcing jobs for them.
What are the critical elements that contribute to the Malaysian suppliers' tacit knowledge acquisition from their international outsourcing relationships?	To examine the key elements of absorptive capacity and relational capital that influence the process of tacit knowledge acquisition by Malaysian suppliers from their international outsourcing relationship.	Out of the three absorptive capacity elements, only business relatedness and interactive involvement influence tacit knowledge acquisition, while prior knowledge is found to be insignificant. In terms of the relational capital factors, interaction and cultural sensitivity are found to be relevant to the acquisition of tacit knowledge. Interaction appears to be the strongest element. In contrast to prior arguments, trust is surprisingly found not to be important in the learning of this type of knowledge.
What benefits does the tacit knowledge acquired provide to the Malaysian suppliers?	To analyze the implications of tacit knowledge acquisition for the Malaysian suppliers in terms of capability enhancement and opportunity recognition.	The newly acquired tacit knowledge affects both capability enhancement and opportunity recognition. Capability enhancement is strongly determined by the acquisition of tacit knowledge.
What are the consequences of relational capital for the Malaysian suppliers' opportunity recognition?	To investigate the impact of relational capital to the Malaysian suppliers' recognition of opportunities.	Trust and interaction are found to have significant impacts on the supplier's opportunity recognition. Cultural sensitivity, meanwhile exhibit no connection with the discovery of potential opportunities.

Undeniably, the tacit knowledge learning process is a difficult one, compared to the learning of explicit knowledge, as it cannot be learned from books and is sometimes difficult to identify let alone transfer. Nevertheless, it can be acquired even in a contractual-based relationship, under the right conditions. In fact, the findings from the present study empirically demonstrate that several elements of absorptive capacity and relational capital, particularly those that allow interaction and involvement between partners, positively affect the acquisition process.

To some extent, the knowledge acquisition process and its outcomes are affected by the complicated characteristics of tacit knowledge and the nature of international outsourcing relationships. Compared to explicit knowledge, which can easily be recognized and transferred, the acquisition of tacit knowledge demands regular and repeated communication, interaction and socialization between the knowledge transferor and the receiver, because it is of a more personal nature and resides within an organization and the mind of its individuals. Thus, tacit knowledge can only be effectively acquired through actions and interactive routines, jointly carried out by the two partners. In addition to the delicate characteristics of tacit knowledge, certain aspects of the international outsourcing relationship explain why some of the findings of this study differ from previous research. For example, there is a significant distance between two partners' locations, while the partnership structure involves no equity arrangement. The features of tacit knowledge and the type of relationship may explain why prior related knowledge and trust fail to influence the acquisition of tacit knowledge according to the current study.

Finally, it should be concluded that international outsourcing relationships not only provide financial returns to the Malaysian suppliers, but also provide opportunities for them to learn new external tacit knowledge from their foreign affiliates. This cooperation also strategically serves as a channel through which the suppliers may discover more potential opportunities for the future. However, the acquisition of tacit knowledge and the recognition of important business opportunities will not happen without the necessary expertise and consistent efforts on the part of the suppliers. They must equip themselves with relevant skills and conviction, and allocate resources to encourage the relevant managers to put as much effort as possible into learning new tacit knowledge and searching for profitable opportunities.

REFERENCES

Abdullah, Lin (2006), "Curriculum development for semiconductor industry in Malaysia: A case study of technical development programs for technicians and engineers in wafer manufacturing company," in Advanced Semiconductor Manufacturing Conference. The 17th Annual IEEE/SEMI. Boston.

Adler, Paul S. (2001), "Market, hierarchy, and trust: the knowledge economy and the future of capitalism," Organization Science, 12, 215-34.

Agus, Arawati and Mokhtar Abdullah (2000), "Total quality management practices in manufacturing companies in Malaysia: An exploratory analysis," Total Quality Management, 11 (8), 1041-51.

Ahmed, Zafar U. and John H. Humphreys (2008), "A conceptual framework for developing-country transnationals: PROTON Malaysia," Thunderbird International Business Review, 50 (1), 45-58.

Ahmed, Zafar U., Osman Mohamed, James P. Johnson, and Meng Leong Yee (2002), "Export promotion programs of Malaysian firms: An international marketing perspective," Journal of Business Research, 55 (10), 831-43.

Ahuja, Gautam (2000), "The duality of collaboration: Inducement and opportunities in the formation of interfirm linkages," Strategic Management Journal, 21 (3), 317-43.

Alonderiene, Raimonda, Asta Pundziene, and Kestutis Krisciunas (2006), "Tacit knowledge aquisition and transfer in the process of informal learning," Problems & Perspectives in Management (3), 134-45.

Altinay, Levent and Catherine L. Wang (2006), "The role of prior knowledge in international franchise partner recruitment," International Journal of Service Industry Management, 17 (5), 430-43.

Ambrosini, Veronique and Cliff Bowman (2001), "Tacit knowledge: some suggestions for operationalization," Journal of Management Studies, 38 (6), 812-29.

Anderson, James C. and David W. Gerbing (1982), "Some methods for respecifying measurement models to obtain unidimensional construct measurement," Journal of Marketing Research (JMR), 19 (4), 453-60.

Andersson, Ulf, Ingmar Bjorkman, and Mats Forsgren (2005a), "Managing subsidiary knowledge creation: The effect of control mechanisms on subsidiary local embeddedness," International Business Review, 14 (5), 521-38.

Andersson, Ulf, Desiree Blankenburg Holm, and Martin Johanson (2005b), "Opportunities, relational embeddedness and network structure," in Managing Opportunity Development in Business Networks, Pervez Ghauri and Amjad Hadjikhani and Jan Johanson, Eds. Basingstoke, Hampshire: Palgrave MacMillan.

Andrews, Kenneth R. (1980), The Concept of Corporate Stategy. Homewood, IL: Prentice-Hall.

Ang, Soon and Andrew C. Inkpen (2008), "Cultural intelligence and offshore outsourcing success: A framework of firm-level intercultural capability," Decision Sciences, 39 (3), 337-58.

Angelina, P (2005), "Malaysia must find its niche in outsourcing space," in The Star. Kuala Lumpur.

Arino, Africa (2003), "Measures of strategic alliance performance: an analysis of construct validity," Journal of International Business Studies, 34 (1), 66-79.

Arrunada, Benito and Xose. Vazquez (2006), "When your contract manufacturer becomes your competitor," Harvard Business Review, 84 (9), 135-44.

Arshad, Siti Iswalah (2001), "Malaysia: Malaysian automotive industry." Seoul, Korea.

AT Kearney (2011), "Offshoring opportunities amid economic turbulence - the A.T. Kearney global service location index 2011."

Athanassiou, Nicholas and Douglas Nigh (2000), "Internationalization, tacit knowledge and the top management teams of MNCs," Journal of International Business Studies, 31 (3), 471.

Aubert, Benoit A., Suzanne Rivard, and Michel Patry (1996), "Development of easures dimensions of IS operation to assess transactions," Omega, International Journal of Management Science, 24 (6), 661-80.

---- (2004), "A transaction cost model of IT outsourcing," Information & Management, 41 (7), 921.

Aulakh, Preet S., Masaaki Kotabe, and Arvind Sahay (1996), "Trust and performance in cross-border marketing partnerships: A behavioral approach," Journal of International Business Studies, 27 (5), 1005-32.

Avolio, Bruce J., Jane M. Howell, and John J. Sosik (1999), "A funny thing happened on the way to the bottom line: Humor as a moderator of leadership style effects," Academy of Management Journal, 42 (2), 219-27.

Azadegan, Arash, Kevin J. Dooley, Phillip L. Carter, and Joseph R. Carter (2008), "Supplier innovativeness and the role of interorganizational learning in enhancing manufacturer capabilities " Journal of Supply Chain Management: A Global Review of Purchasing & Supply, 44 (4), 14-35.

Bahrami, Bahman (2009), "A look at outsourcing offshore," Competitiveness Review, 19 (3), 212-23.

Barboza, David and Louise Story (2007), "Toymaking in China: Mattel's way," in The New York Times. New York.

Barney, Jay (1991), "Firm resources and sustained competitive advantage," Journal of Management, 17 (1), 99-120.

Baxter, Roger (2009), "Reflective and formative metrics of relationship value: A commentary essay," in Journal of Business Research, Vol. 62.

Becerra, Manuel, Randi Lunnan, and Lars Huemer (2008), "Trustworthiness, risk, and the transfer of tacit and explicit knowledge between alliance partners," Journal of Management Studies, 45 (4), 691-713.

Berman, Shawn L., Jonathan Down, and Charles W. L. Hill (2002), "Tacit knowledge as a source of competitive advantage in the national basketball association," Academy of Management Journal, 45 (1), 13-31.

Berson, Yair , Boas Shamir, Bruce J. Avolio, and Micha Popper (2001), "The relationship between vision strength, leadership style, and context," The Leadership Quarterly, 12, 53-73.

Bertrand, Olivier (2010), "What goes around, come around: Effects of offshore outsouring on the export performance of firm," Journal of International Business Studies, 1-11.

Bhatt, Ganesh D. (2000), "Information dynamics, learning and knowledge creation in organizations," The Learning Organization, The Volume: 7 Issue: 2 2000, 7 (2), 10.

Birkinshaw, Julian, Allen Morrison, and John Hulland (1995), "Structural and competitive determinants of a global integration strategy," Strategic Management Journal, 16 (8), 637-55.

Boersma, Margreet F., Peter J. Buckley, and Pervez N. Ghauri (2003), "Trust in international joint venture relationships," Journal of Business Research, 56 (12), 1031.

Bollen, K. and R. Lennox (1991), "Conventional wisdom on measurement: A structural equation perspective," Psychological Bulletin, 110 (2), 305.
Bonache, Jaime and Chris Brewster (2001), "Knowledge transfer and the management of expatriation," Thunderbird International Business Review, 43 (1), 145-68.

Brouthers, Keith D. and Lance Eliot Brouthers (2001), "Explaining the national cultural distance paradox," Journal of International Business Studies, 32 (1), 177-89.

Bryce, David J. and Michael Useem (1998), "The impact of corporate outsourcing on company value," European Management Journal, 16 (6), 635.

Buckley, Peter J. (2002), "Is the international business research agenda running out of steam?," Journal of International Business Studies, 33 (2), 365-73.

Cassel, Claes M. and Peter Hackl (2000), "On measurement of intangible assets: A study of robustness of partial least squares," Total Quality Management, 11 (7), S897.

Cavusgil, S. Tamer, Roger J. Calantone, and Zhao Yushan (2003), "Tacit knowledge transfer and firm innovation capability," Journal of Business & Industrial Marketing, 18 (1), 6-21.

Chin, Wynne (1998a), "The partial least squares approach to structural equation modeling," in Modern methods for business research, George A. Marcoulides, Ed. Mahwah, N.J.: Lawrence Erlbaum.

Chin, Wynne W. (1998b), "Issues and opinion on structural equation modeling," in MIS Quarterly. 22 ed.

Chin, Wynne W., Barbara L. Marcolin, and Peter R. Newsted (2003), "A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study," Information Systems Research, 14 (2), 189-217.

Ching Chyi, Lee and Yang Jie (2000), "Knowledge value chain," Journal of Management Development, 19 (9), 783-93.

Ching, NS (1997), "An empirical study on the performance of marketing cost controls by Malaysian firms." Penang, Malaysia: Science University of Malaysia.

Choi, E. Kwan (2007), "To outsource or not to outsource in an integrated world," International Review of Economics & Finance, 16 (4), 521-27.

Chow, Wing S. and Lai Sheung Chan (2008), "Social network, social trust and shared goals in organizational knowledge sharing," Information & Management, 45 (7), 458-65.

Cohen, Wesley M. and Daniel A. Levinthal (1990), "Absorptive capacity: A new perspective on learning and innovation," Administrative Science Quarterly, 35 (1), 128-52.

Collins, Jamie D. and Michael A. Hitt (2006), "Leveraging tacit knowledge in alliances: The importance of using relational capabilities to build and leverage relational capital," Journal of Engineering & Technology Management, 23 (3), 147-67.

Collis, David J. (1994), "Research note: How valuable are organizational capabilities?," Strategic Management Journal, 15 (8), 143-52.

Coltman, Tim, Timothy M. Devinney, David F. Midgley, and Sunil Venaik (2008), "Formative versus reflective measurement models: Two applications of formative measurement," Journal of Business Research, 61 (12), 1250-62.

Cool, Karel, Ingemar Dierickx, and David Jemison (1989), "Business strategy, market structure and risk-return relationships: A structural approach," Strategic Management Journal, 10 (6), 507-22.

Corbett, Andrew C. (2007), "Learning asymmetries and the discovery of entrepreneurial opportunities," Journal of Business Venturing, 22 (1), 97-118.

Cousins, Paul D., Robert B. Handfield, Benn Lawson, and Kenneth J. Petersen (2006), "Creating supply chain relational capital: The impact of formal and informal socialization processes," Journal of Operations Management, 24 (6), 851-63.

Craig, Samuel C. and Susan P. Douglas (2005), International marketing research (3 ed.). Chichester: John Wiley.

Darr, Eric D. and Terri R. Kurtzberg (2000), "An investigation of partner similarity dimensions on knowledge transfer," Organizational Behavior and Human Decision Processes, 88 (1), 28-44.

Das, T. K. and Teng Bing-Sheng (2000), "A resource-based theory of strategic alliances," Journal of Management, 26 (1), 31-62.

Das, T. K. and Bing-Sheng Teng (1998), "Between trust and control: developing confidence in partner cooperation in alliance " Academy of Management Review, 23 (3), 491-512.

de Bruijn, Erik J. and Xianfeng Jia (1993), "Managing Sino-Western joint ventures: product selection strategy," Management International Review (MIR), 33 (4), 335-60.

Delios, Andrew and Paul W. Beamish (1999), "Geographic scope, product diversification and the corporate performance of Japanese firms," Strategic Management Journal, 20 (8), 711-27.

Dhanaraj, Charles, Marjorie A. Lyles, H. Kevin Steensma, and Laszlo Tihanyi (2004), "Managing tacit and explicit knowledge transfer in lJVs: the role of relational embeddedness and the impact on performance," Journal of International Business Studies, 35 (5), 428-42.

Diamantopoulos, Adamantios and Nicolas Papadopoulos (2010), "Assessing the cross-national invariance of formative measures: Guidelines for international business researchers," Journal of International Business Studies, 41 (2), 360-70.

Diamantopoulos, Adamantios, Petra Riefler, and Katharina P. Roth (2008), "Advancing formative measurement models," Journal of Business Research, 61 (12), 1203-18.

Diamantopoulos, Adamantios and Judy A. Siguaw (2006), "Formative versus reflective indicators in organizational measure development: a comparison and empirical Illustration," British Journal of Management, 17 (4), 263-82.

Dillman, Don A. (1978), Mail and telephone survey: the total design. New York: Wiley.

Dillman, Don A. , Jolene D. Smyth, and Leah Melani Christian (2008), Internet, mail and mixed-mode surveys: the tailored design method. (3 ed.). Chichester: John Wiley.

do Rosario Cabrita, Maria and Nick Bontis (2008), "Intellectual capital and business performance in the Portuguese banking industry," International Journal of Technology Management, 43 (1-3), 212-37.

Dodgson, Mark (1993a), "Learning, trust, and technological collaboration," Human Relations, 46 (1), 77-95.

---- (1993b), "Organizational learning: A review of some literatures," Organization Studies (Walter de Gruyter GmbH & Co. KG.), 14 (3), 375-94.

Doh, Jonathan P. (2005), "Offshore outsourcing: Implications for international business and strategic management theory and practice," Journal of Management Studies, 42 (3), 695-704.

Doney, Patricia M. and Joseph P. Cannon (1997), "An examination of the nature of trust in buyer-seller relationships," Journal of Marketing, 61 (2), 35.

Dong-Jin, Lee and Jang Jee-In (1998), "The role of relational exchange between exporters and importers evidence from small and medium-sized Australiane exporters," Journal of Small Business Management, 36 (4), 12-23.
DOS (2008), "Malaysia external trade statistics for the month of December 2008 and the period of January-December 2008."

Doty, Harold D. and William H. Glick (1998), "Common methods bias: does common methods variance really bias results? ," Organizational Research Methods, 1 (4).

Doz, Yves L. (1996), "The evolution of cooperation in strategic alliances: Initial conditions or learning processes? ," Strategic Management Journal, 17 (7), 55-83.

Drogendijk, Rian and Arjen Slangen (2006), "Hofstede, Schwartz, or managerial perceptions? The effects of different cultural distance measures on establishment mode choices by multinational enterprises," International Business Review, 15 (4), 361-80.

Dyer, Jeffrey H. and Wujin Chu (2003), "The role of trustworthiness in reducing transaction costs and improving performance: Empirical evidence from the United States, Japan, and Korea," Organization Science, 14 (1), 57-68.

Dyer, Jeffrey H. and Harbir Singh (1998), "The relational view: cooperative strategy and sources of interorganizational competitive advantage " Academy of Management Review, 23 (4), 660-79.

Easterby-Smith, Mark, Marjorie A. Lyles, and Eric W. K. Tsang (2008), "Inter-organizational knowledge transfer: Current themes and future prospects," Journal of Management Studies, 45 (4), 677-90.

Eckhardt, Jonathan T. and Scott A. Shane (2003), "Opportunities and entrepreneurship," Journal of Management, 29 (3), 333-49.

Edwards, Jeffrey R. and Richard P. Bagozzi (2000), "On the nature and direction of relationships between constructs and measures," Psychological Methods, 5 (2), 155-74.

EIA (2003), "The global liquefied natural gas market: status and outlook," Energy Information Administration.

EIU (2005), "Malaysia," in Automotive Forecast Asia & Australasia: EIU: Economist Intelligence Unit.

Elmuti, Dean and Yunus Kathawala (2000), "The effects of global outsourcing strategies on participants' attitudes and organizational effectiveness," International Journal of Manpower, 21 (1/2), 112-28.

Eng, Teck-Yong (2005), "The effects of learning on relationship value in a business network context," Journal of Business-to-Business Marketing, 12 (4), 67-101.

Eriksson, Kent and Sylvie Chetty (2003), "The effect of experience and absorptive capacity on foreign market knowledge," International Business Review, 12 (6), 673.

Evangelista, Felicitas and Le Nguyen Hau (2009), "Organizational context and knowledge acquisition in IJVs: An empirical study," Journal of World Business, 44 (1), 63-73.

Falk, Frank R. and Nancy B. Miller (1992), A primer for soft modeling. Akron, OH: University of Akron Press.

Fernandez, Francis (2008), "Premier set to make waves in hybrid car market," in Business Times.

Field, Andy (2005), Discovering statistics using SPSS (2 ed.). London: Sage Publication.

Fink, Matthias, Rainer Harms, and Sascha Kraus (2008), "Cooperative internationalization of SMEs: Self-commitment as a success factor for international entrepreneurship," European Management Journal, 26 (6), 429-40.

Fiol, C. Marlene and Marjorie A. Lyles (1985), "Organizational learning," Academy of Management Review, 10 (4), 803-13.

Flynn, Barbara B., Sadao Sakakibara, Roger G. Schroeder, Kimberly A. Bates, and E. James Flynn (1990), "Empirical Research Methods in Operations Management," Journal of Operations Management, 9 (2), 250-84.

Fornell, Claes and Fred L. Bookstein (1982), "Two structural equation models: LISREL and PLS applied to consumer exit-voice theory," Journal of Marketing Research (JMR), 19 (4), 440-52.

Fornell, Claes and David F. Larcker (1981a), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," Journal of Marketing Research (JMR), 18 (1), 39-50.

---- (1981b), "Structural equation models with unobservable variables and measurement error: Algebra and statistics," Journal of Marketing Research (JMR), 18 (3), 382-88.

Fornell, Claes, Peter Lorange, and Johan Roos (1990), "The cooperative venture formation process: A talent variable structural modeling approach," Management Science, 36 (10), 1246-55.

Frazier, Gary L., James D. Gill, and Sudhir H. Kale (1989), "Dealer dependence levels and reciprocal actions in a channel of distribution in a developing country," Journal of Marketing, 53 (1), 50-69.

Ganesan, Shankar (1994), "Determinants of long-term orientation in buyer-seller relationships," Journal of Marketing, 58 (2), 1.

Gefen, David and Detmar Straub (2005), "A practical guide to factorial validity using PLS-GRAPH: Tutorial and annotated example " Communications of AIS, 2005 (16), 91-109.

Gertler, Meric S. (2003), "Tacit knowledge and the economic geography of context, or The undefinable tacitness of being (there)," Journal of Economic Geography, 3 (1), 75.

Giroud, Axele (2007), "MNEs vertical linkages: The experience of Vietnam after Malaysia," International Business Review, 16 (2), 159-76.

Gold, Andrew H., Arvind Malhotra, and Albert H. Segars (2001), "Knowledge management: An organizational capabilities perspective," Journal of Management Information Systems, 18 (1), 185-214.

Grant, Robert M. (1997), "The knowledge-based view of the firm: Implications for management practice," Long Range Planning, 30 (3), 450-54.

---- (1996a), "Prospering in dynamically-competitive environments: Organizational capability as knowledge integration," Organization Science, 7 (4), 375-87.

---- (1996b), "Toward a knowledge-based theory of the firm " Strategic Management Journal, 17, 109-22.

Grayson Jr, C. Jackson and Carla S. O'Dell (1998), "Mining your hidden resources," Across the Board, 35 (4), 23-28.

Gregorio, Dante Di, Martina Musteen, and Douglas E. Thomas (2009), "Offshore outsourcing as a source of international competitiveness for SMEs," Journal of International Business Studies, 40 (6), 969-88.

Gulati, Ranjay (1995), "Does familiarity breed trust? The implications of repeated ties for contractual choice in," Academy of Management Journal, 38 (1), 85.

---- (1999), "Network location and learning: The influence of network resources and firm capabilities on," Strategic Management Journal, 20 (5), 397.

Gulati, Ranjay and Martin Gargiulo (1999), "Where do interorganizational networks come from? ," American Journal of Sociology, 104 (5).

Gupta, Amar and Sourav Mukherji (2007), "Offshoring: the transition from economic drivers toward strategic global partnership and 24-hour knowledge factory," Journal of Electronic Commerce in Organizations, 5 (2), 1-23.

Hadjikhani, Amjad, Pervez Ghauri, and Jan Johanson (2005a), "Introduction: opportunity development in business networks," in Managing Opportunity Development in Business Networks, Pervez Ghauri and Amjad Hadjikhani and Jan Johanson, Eds. Basingstoke, Hampshire: Palgrave McMillan.

Hadjikhani, Amjad, Pervez N. Ghauri, and Jan Johanson (2005b), "Introduction: opportunity development in business networks," in Managing Opportunity Development in Business Networks, Pervez N. Ghauri and Amjad Hadjikhani and Jan Johanson, Eds.: Palgrave Macmillan.

Hair, Joseph F. Jr, William C. Black, Barry J. Babin, Rolph E. Anderson, and Ronald L. Tatham (2006), Multivariate Data Analysis (6th ed.). Upper Saddle River, New Jersey: Pearson-Prentice Hall.

Hair, Joseph F. Jr, Athur H. Money, Phillip Samouel, and Mike Page (2007), Research method for business. West Sussex, England: John Wiley & Sons Ltd.

Haldin-Herrgard, Tua (2000), "Difficulties in diffusion of tacit knowledge in organizations," Journal of Intellectual Capital, 1 (4), 357-65.

Hall, Richard (1992), "The stretegic analysis of intangible resources," Strategic Management Journal, 13 (2), 135-44.

Hamel, Gary (1991), "Competition for competence and inter-partner learning within international strategic alliances," Strategic Management Journal, 12, 83-103.

Hanvanich, Sangphet, Malika Richards, Stewart R. Miller, and S. Tamer Cavusgil (2005), "Technology and the effects of cultural differences and task relatedness: A study of shareholder value creation in domestic and international joint ventures," International Business Review, 14 (4), 397-414.

Harland, Christine, Louise Knight, Richard Lamming, and Helen Walker (2005), "Outsourcing: Assessing the risks and benefits for organisations, sectors and nations," International Journal of Operations & Production Management, 25 (9), 831-50.

Harzing, Anne-Wil (2000), "Cross-national industrial mail surveys: Why do response differ between countries?," Industrial Marketing Management, 29 (3), 243-454.

Hau, Le Nguyen and Felicitas Evangelista (2007), "Acquiring tacit and explicit marketing knowledge from foreign partners in IJVs," Journal of Business Research, 60 (11), 1152-65.

Hendry, John (1995), "Culture, community and networks: the hidden cost of outsourcing " European Management Journal 13 (2), 193-200.

Hennart, Jean-Francois (1988), "A transaction costs theory of equity joint ventures," Strategic Management Journal, 9 (4), 361-74.

Henseler, Jorg, Christian Ringle, M., and Rudolf Sinkovics, R. (2009), "The use of partial least squares pathmodeling in international marketing," in Advances in International Marketing, Rudolf Sinkovics and Pervez N. Ghauri, Eds. Vol. 20. Bingley, UK: Emerald Group Publishing Limited.

Hill, Charles W. L (2009), International business: Competing in the global marketplace (7th ed.). London McGraw-Hill Irwin.

Hill, Richard C. and Kuniko Fujita (2007), "'Detroit in Asia': Ideology, the state and regional development Policy in Thailand," in Workshop on Neoliberalism in East Asia, National University of Singapore, November 15-16, 2007. Singapore.

Hinkin, Timothy R. (1995), "A review of scale development practices in the study of organizations," Journal of Management, 21 (5), 967-88.

Hitt, Michael A., M. Tina Dacin, Edward Levitas, Jean-Luc Arregle, and Anca Borza (2000), "Partner selection in emerging and developed market contexts: Resource-based and organizational learning perspectives " Academy of Management Journal, 43 (3), 449-67.

Holm, Desiree Blankenburg, Kent Eriksson, and Jan Johanson (1996), "Business networks and cooperation in international business relationships " Journal of International Business Studies, 27 (5), 1033-53.

Howell, Jane M. and Bruce J. Avolio (1993), "Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of Consolidated-Business-Unit performance," Journal of Applied Psychology, 78 (6), 891-902.

Howells, Jeremy (1996), "Tacit knowledge, innovation and technology transfer," Technology Analysis & Strategic Management, 8 (2), 91.

Huang, Jimmy C. and Sue Newell (2003), "Knowledge integration processes and dynamics within the context of cross-functional projects," International Journal of Project Management, 21 (3), 167.

Hulland, John (1999), "Use of partial least squares (PLS) in strategic management research: A review of four recent," Strategic Management Journal, 20 (2), 195.

Hyder, Akmal S. and Pervez N. Ghauri (2000), "Managing international joint venture relationships," Industrial Marketing Management, 29 (3), 205-18.

Inkpen, Andrew C. (2005), "Knowledge acquisition and transfer in strategic alliances " in Knowledge Management: Organizational and Technological Dimensions, Joseph Davis and Eswaran Subrahmanian and Art Westerberg, Eds. New York: Physica-Verlag Heidelberg.

---- (1998), "Learning and knowledge acquisition through international strategic alliances," Academy of Management Executive, 12 (4), 69-80.

---- (2002), "Learning, knowledge management and strategic alliances: So many studies, so many unanswered questions," in Cooperative strategies and alliances, Farok J. Contractor and Peter Lorange, Eds. Oxford: Elsevier Science Ltd.

---- (2008), "Managing knowledge transfer in international alliances," Thunderbird International Business Review, 50 (2), 77-90.

Inkpen, Andrew C. and Adva Dinur (1998), "Knowledge management processes and international joint ventures," Organization Science, 9 (4), 454-68.

Inkpen, Andrew C. and Wang Pien (2006), "An examination of collaboration and knowledge transfer: China-Singapore Suzhou industrial park," Journal of Management Studies, 43 (4), 779-811.

Inkpen, Andrew C. and Eric W. K. Tsang (2005a), "Social capital, networks and knowledge transfer " Academy of Management Review, 30 (1), 146-65.

---- (2005b), "Social capital, networks and knowledge transfer," Academy of Management Review, 30 (1), 146-65.

Ireland, R. Duane, Michael A. Hitt, and Deepa Vaidyanath (2002), "Alliance management as a source of competitive advantage," Journal of Management, 28 (3), 413-46.

Ishak, Sallehuddin (2008), "The developement of Malaysian petrochemical complexes of the East-Coast Industrial Corridor," PhD, University of Glasgow.

Iwatake, Toshihiro (2005), "Views from Japan: Future direction of ASEAN automotive industry." Jakarta.

Jahns, Christopher, Evi Hartmann, and Lydia Bals (2006), "Offshoring: Dimensions and diffusion of a new business concept," Journal of Purchasing & Supply Management, 12 (4), 218-31.

Janowicz-Panjaitan, Martyna and Niels G. Noorderhaven (2009), "Trust, calculation, and interorganizational learning of tacit knowledge: An organizational roles perspective," Organization Studies (01708406), 30 (10), 1021-44.

Jap, Sandy D. (1999), "Pie-expansion efforts: Collaboration processes in buyer-supplier relationships," Journal of Marketing Research (JMR), 36 (4), 461-75.

Jarvenpaaa, S.L. and D.S. Staples (2000), "The use of collaborative electronic media for information sharing: An exploratory study of determinants," Journal of Strategic Information Systems, 9, 129-54.

Jarvis, Cheryl Burke, Scott B. Mackenzie, and Philip M. Podsakoff (2003), "A critical review of construct indicators and measurement model misspecification in marketing and consumer research," Journal of Consumer Research, 30 (2), 199-218.

Johanson, Jan and Jan-Erik Vahlne (2006), "Commitment and opportunity development in the internationalization process: A note on the uppsala internationalization process model," Management International Review (MIR), 46 (2), 165-78.

---- (1990), "The mechanism of internationalism," International Marketing Review, 7 (4), 11.

Johnson, Jean L., John B. Cullen, Tomoaki Sakano, and Hideyuki Takenouchi (1996), "Setting the stage for trust and strategic integration in Japanese-U.S cooperative alliance," Journal of International Business Studies, 27 (5), 981-1004.

Johnson, Jean L., Tomoaki Sakano, Joseph A. Cote, and Naoto Onzo (1993), "The exercise of interfirm power and its repercussions in U.S.-Japanese channel relationships," Journal of Marketing, 57 (2), 1.

Johnston, David A., David M. McCutcheon, F. Ian Stuart, and Hazel Kerwood (2004), "Effects of supplier trust on performance of cooperative supplier relationships," Journal of Operations Management, 22 (1), 23.

Jones, Ronald, Henryk Kierzkowski, and Chen Lurong (2005), "What does evidence tell us about fragmentation and outsourcing?," International Review of Economics & Finance, 14 (3), 305-16.

Kale, Prashant and Harbir Singh (2007), "Building firm capabilities through learning: The role of the alliance learning process in alliance capability and firm-level alliance success," Strategic Management Journal, 28 (10), 981-1000.

---- (2000), "Learning and protection of proprietary assets in strategic alliances: Building relational capital " Strategic Management Journal, 21 (3), 217-37.

Kale, Prashant, Harbir Singh, and Howard Perlmutter (2000), "Learning and protection of proprietary assets in strategic allainces: Building relational capital " Strategic Management Journal, 21 (3), 217-37.

Kanter, Rosabeth Moss (1994), "Collaborative advantage: The art of alliances," Harvard Business Review, 72 (4), 96.

Kaufman, Allen, Craig H. Wood, and Gregory Theyel (2000), "Collaboration and technology linkages: A strategic supplier typology," Strategic Management Journal, 21 (6), 649.

Kaufmann, Lutz and Craig R. Carter (2006), "International supply relationships and non-financial performanceâ€"A comparison of U.S. and German practices," Journal of Operations Management, 24 (5), 653-75.

Kelley, Kathleen and Robert E. Spekman (1994), "Starting out right: Negotiation lessons for domestic and cross-cultural business alliances," Business Horizons, 37 (1), 71-78.

Kessler, Jan Joost, Trudy Rood, Tonnie Tekelenburg, and Michel Bakkenes (2007), "Biodiversity and socioeconomic impacts of selected agro-commodity production systems," Journal of Environment & Development, 16 (2), 131-60.

Kim, Chang-Su and Andrew C. Inkpen (2005), "Cross-border R&D alliances, absorptive capacity and technology learning," Journal of International Management, 11 (3), 313-29.

Kim, Linsu (2001), "Absorptive capacity, co-operation, and knowledge creation: Samsung's leapfrogging in semiconducters," in Knowledge Emergence – Social, Technical, and Evolutionary Dimensions of Knowledge Creation, Ikujiro Nonana and Toshihiro Nishiguchi, Eds. Oxford: Oxford University Press.

---- (1998), "Crisis construction and organizational learning: Capability building in catching-up at Hyundai Motor," Organization Science, 9 (4), 506-21.

---- (1997), "The dynamics of Samsung's technological learning in semiconductors," California Management Review, 39 (3), 86-100.

Kirzner, Israel M. (1997), "Entrepreneurial discovery and the competitive market process: An Austrian approach," Journal of Economic Literature, 35.

Knudsen, Mette Praest (2007), "The relative importance of interfirm relationships and knowledge transfer for new product development success," Journal of Product Innovation Management, 24 (2), 117-38.

Kogut, Bruce and Udo Zander (1993), "Knowledge of the firm and the evolutionary theory of the multinational corporation " Journal of International Business Studies, 24 (4), 625-45.

---- (1992), "Knowledge of the firm, combinative capabilities and the replication of technology " Organization Science, 3 (3), 383-97.

---- (1996), "What firms do? Coordination, identity, and learning," Organization Science, 7 (5), 502-18.

Koh, Jeongsuk and N. Venkatraman (1991), "Joint venture formations and stock market reactions: An assessment in the information technology sector " Academy of Management Journal, 34 (4), 869-92.

Koi Nyen, Wong and Tang Tuck Cheong (2008), "The effects of exchange rate variability on Malaysia's disaggregated electrical exports," Journal of Economic Studies, 35 (2), 154-69.

Koskinen, Kaj U. (2000), "Tacit knowledge as a promoter of project success," European Journal of Purchasing & Supply Management 6 (2000) 41}47, 6, 41-47.

Koskinen, Kaj U. and Hannu Vanharanta (2002), "The role of tacit knowledge in innovation processes of small technology companies," International Journal of Production Economics, 80 (1), 57.

Kostova, Tatiana and Kendall Roth (2003), "Social capital in multinational corporations and a micro-macro model of its formation," Academy of Management Review, 28 (2), 297-317.

Kotabe, Masaaki and Janet Y. Murray (1990), "Linking product and process innovations and modes of international sourcing in global competition: a case of foreign multinational firms," Journal of International Business Studies, 21 (3), 383-408.

Kumar, Nirmalya, Lisa K. Scheer, and Jan-Benedict E. M. Steenkamp (1995), "The effects of supplier fairness on vulnerable resellers," Journal of Marketing Research (JMR), 32 (1), 54-65.

Kuo-Hsiung, Chang and Donald F. Gotcher (2008), "Relationship learning and dyadic knowledge creation in international subcontracting relationships: The supplier's perspective," International Journal of Technology Management, 41 (1/2), 55-74.

LaBahn, Douglas W. and Katrin R. Harich (1997), "Sensitivity to national business culture: Effects on U.S.-Mexican channel relationship performance," Journal of International Marketing, 5 (4), 29.

Lai Xuan, Thuy and Quang Truong (2005), "Relational capital and performance of international joint ventures in Vietnam," Asia Pacific Business Review, 11 (3), 389-410.

Lam, Alice (2000), "Tacit knowledge, organizational learning and societal institutions: An integrated framework," Organization Studies, 21 (3), 487-513.

Lane, Peter J. and Michael Lubatkin (1998), "Relative absorptive capacity and interorganizational learning," Strategic Management Journal, 19 (5), 461.

Lane, Peter J., Jane E. Salk, and Marjorie A. Lyles (2001), "Absorptive capacity, learning and performance in international joint ventures," Strategic Management Journal, 22 (12), 1139-61.

Lankford, William M. and Faramarz Parsa (1999), "Outsourcing: A primer," Management Decision, 37 (3/4), 310-16.

Larson, Andrea (1992), "Network dyads in entrepreneurial settings: A study of the governance of exchange relationships," Administrative Science Quarterly, 37 (1), 76-104.

Larsson, Rikard, Lars Bengtsson, Kristina Henriksson, and Judith Sparks (1998), "The interorganizational learning dilemma: Collective knowledge development in strategic alliances," Organization Science, 9 (3), 285-305.

Lee, Ching Chyi and Jie Yang (2000), "Knowledge value chain," Journal of Management Development, 19 (9), 783-93.

Lee, Don Y. and Eric W. K. Tsang (2001), "The effects of entrepreneurial personality, background and network activities on venture growth," Journal of Management Studies, 38 (4), 583-602.

Lee, Yikuan and S. Tamer Cavusgil (2006), "Enhancing alliance performance: The effects of contractual-based versus relational-based governance," Journal of Business Research, 59 (8), 896-905.

Lei, David and John W. Slocum Jr (1992), "Global strategy, competence-building and strategic alliances," California Management Review, 35 (1), 81-97.

Leong, Yee Meng. (1996), "An empirical investigation of export promotion program for Malaysian firms.," in School of Management. Penang, Malaysia: Universiti of Science Malaysia.

Les Tien-Shang, Lee and Badri Munir Sukoco (2007), "The effects of entrepreneurial orientation and knowledge management capability on organizational effectiveness in Taiwan: The moderating role of social capital," International Journal of Management, 24 (3), 549-72.

Levin, Daniel Z. and Rob Cross (2004), "The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer," Management Science, 50 (11), 1477-90.

Levitas, Edward and Hermann Achidi Ndofor (2006), "What to do with the resource-based view: A few suggestions for what ails the RBV that supporters and opponents might accept," Journal of Management Inquiry, 15 (2), 135-44.

Li, Julie Juan, Laura Poppo, and Kevin Zheng Zhou (2010), "Relational mechanisms, formal contracts, and local knowledge acquisition by international subsidiaries," Strategic Management Journal, 31 (4), 349-70.

Lian, L.W. (2005), "Malaysia retains 3rd spot in global outsourcing.," in The Edge.

Lianxi, Zhou, Wu Wei-ping, and Luo Xueming (2007), "Internationalization and the performance of born-global SMEs: the mediating role of social networks," Journal of International Business Studies, 38 (4), 673-90.

Liao, Shu-hsien, Wu-Chen Fei, and Chih-Chiang Chen (2007), "Knowledge sharing, absorptive capacity, and innovation capability: An empirical study of Taiwan's knowledge-intensive industries," Journal of Information Science, 33 (3), 340-59.

Lings, Ian N. and Kate M. Owen (2007), "Buying a sponsor's brand: The role of affective commitment to the sponsored team," Journal of Marketing Management, 23 (5/6), 483-96.

Liu, Chia-Ling (2005), "Knowledge acquisition from international strategic alliances - An empirical study of the electronics and IT industry in Taiwan," University of Manchester.

Liu, Chia-Ling (Eunice), Pervez N. Pervez N. Ghauri, and Rudolf R. Sinkovics (2009), "Understanding the impact of relational capital and organizational learning on alliance outcomes," Journal of World Business.

London, Sandra J. and Curt J. Dommeyer (1990), "Increasing response to industrial mail surveys," Industrial Marketing Management, 19 (3), 235-41.

Lorentz, Harri and Pervez N. Ghauri (2010), "Demand supply network opportunity development processes in emerging markets: Positioning for strategy realization in Russia," Industrial Marketing Management, 39 (2), 240-51.

Lubit, Roy (2001), "Tacit knowledge and knowledge Management: The keys to sustainable competitive advantage," Organizational Dynamics, 29 (3), 164.

Lui, Steven S., Hang-yue Ngo, and Alice H. Y. Hon (2006), "Coercive strategy in interfirm cooperation: Mediating roles of interpersonal and interorganizational trust," Journal of Business Research, 59 (4), 466-74.

Lumpkin, G. T. and Benyamin Bergmann Lichtenstein (2005), "The role of organizational learning in the opportunity-recognition process," Entrepreneurship: Theory & Practice, 29 (4), 451-72.

Lyles, Marjorie A. (1991), "A Study of the interaction of firm business area relatedness and the propensity to joint venture," Journal of Global Marketing, 5 (1/2), 91.

Lyles, Marjorie A., Le Dang Doanh, and Jeffrey Q. Barden (2000), "Trust, organizational controls, knowledge acquisition from the foreign parents, and performance in Vietnamese international joint venture," in Working Papers (William Davidson Institute) -- University of Michigan Business School.

Lyles, Marjorie A. and Jane E. Salk (1996), "Knowledge acquisition from foreign parents in international joint ventures: An empirical examination in the Hungarian context " Journal of International Business Studies, 27 (5), 877-903.

---- (2007), "Knowledge acquisition from foreign parents in international joint ventures: an empirical examination in the Hungarian context," Journal of International Business Studies, 38 (1), 3-18.

Lyons, Edward R. (2001), "Towards global outsourcing: Leveraging value for an international portfolio," Journal of Corporate Real Estate, 3 (4), 346-55.

Mahidin, Mohd Uzir and Kanageswary R (2004), "The Development of the Automobile Industry and the Road Ahead."

Mahmood, Amir (2000), "Export specialization and competitiveness of the Malaysian manufacturing: trends, challenges and prospects," in Conference on International Trade Education and Research: Managing Globalisation for Prosperity. Melbourbe.

Makhija, Mona V. and Usha Ganesh (1997), "The relationship between control and partner learning-related joint ventures," Organization Science, 8 (5), 508-27.

Malhotra, Manoj K. and Varun Grover (1998), "An assessment of survey research in POM: from constructs to theory," Journal of Operations Management, 16 (4), 407-25.

Malhotra, Naresh K. (2006), Marketing research: An applied orientation (3rd ed.). London: Prentice-Hall International

Mansur, Mustafa (2005), "Manufacturing - Trends in Malaysia." Melbourne, Australia: APEC.

Marianna, Sigala and Chalkiti Kalotina (2007), "Improving performance through tacit knowledge externalisation and utilisation: Preliminary findings from Greek hotels," International Journal of Productivity & Performance Management, 56 (5), 456-83.

Martin, X. and R. Salomon (2003), "Knowledge transfer capacity and its implications for the theory of the multinational corporation," Journal of International Business Studies, 34 (4), 356-73.

Maskell, Peter, Torben Pedersen, Bent Petersen, and Jens Dick-Nielsen (2007), "Learning paths to offshore outsourcing: From cost reduction to knowledge seeking," Industry & Innovation, 14 (3), 239-57.

McEvily, Susan K. and Bala Chakravarthy (2002), "The Persistence of Knowledge-Based Advantage: An Empirical Test for Product Performance and Technological Knowledge," Strategic Management Journal, 23 (4), 285.

Mentzer, John T. and Daniel J. Flint (1997), "Validity in logistics research," Journal of Business Logistics, 18 (1), 199-216.

Merchant, Hemant and Dan Schendel (2000), "How do international joint ventures create shareholder value? ," Strategic Management Journal, 21 (7), 723.

MIDA (2004), "Business opportunities in Malaysia's electronics industry." Kuala Lumpur: Electronics Industry Division and ICT & Electrical Industries Division.

---- (2006), "Malaysia's machinery and equipment industry: toward regional manufacturing and distribution hub," Vol. 2009.

---- (2007), "Malaysia: Your gateway to the ASEAN automotive market." Kuala Lumpur: MIDA Publication.

---- (2008), "MIDA Annual Media Conference on the Performance of the Manufacturing and Services Sector in 2007." Kuala Lumpur: MIDA.

Minbaeva, D., T. Pedersen, I. Bjorkman, C. F. Fey, and H. J. Park (2003), "MNC knowledge transfer, subsidiary absorptive capacity, and HRM," Journal of International Business Studies, 34 (6), 586-99.

MITI (2006), "Third Industrial Master Plan (IMP3) ". Kuala Lumpur.

Modi, Sachin B. and Vincent A. Mabert (2007), "Supplier development: Improving supplier performance through knowledge transfer," Journal of Operations Management, 25 (1), 42-64.

Mohr, Jakki and Robert Spekman (1994), "Characteristics of partnership success: Partnership attributes, communication behavior, and conflict resolution techniques," Strategic Management Journal, 15 (2), 135-52.

Mol, Michael J., Pieter Pauwels, Paul Matthyssens, and Lieven Quintens (2004), "A technological contingency perspective on the depth and scope of international outsourcing," Journal of International Management, 10 (2), 287-305.

Mol, Michael J., Rob J. M. van Tulder, and Paul R. Beije (2005), "Antecedents and performance consequences of international outsourcing," International Business Review, 14 (5), 599-617.

Monczka, Robert M. and Robert J. Trent (1991), "Global Sourcing: A development approach," International Journal of Purchasing & Materials Management, 27 (2), 2-8.

Moorman, Christine, Gerald Zaltman, and Rohit Deshpande (1992), "Relationships between providers and users of market research: The dynamics of trust within and between organizations," Journal of Marketing Research (JMR), 29 (3), 314-28.

Moreira, Antonio Carrizo (2009), "Knowledge capability flows in buyer-supplier relationships: challenges for small domestic suppliers in international contexts," Journal of Small Business and Enterprise Development, 16 (1), 93-114.

Morgan, Robert M. and Shelby D. Hunt (1994), "The commitment-trust theory of relationship marketing," Journal of Marketing, 58 (3), 20.

Morosini, Piero, Scott Shane, and Harbir Singh (1998), "National cultural distance and cross-border acquisition performance," Journal of International Business Studies, 29 (1), 137-58.

Morrow Jr, J. L., David G. Sirmon, Michael A. Hitt, and Tim R. Holcomb (2007), "Creating value in the face of declining performance: firm strategies and organizational recovery," Strategic Management Journal, 28 (3), 271-83.

Mowery, David C., Joanne E. Oxley, and Brian S. Silverman (1996), "Strategic alliances and interfirm knowledge transfer " Strategic Management Journal, 17, 77-91.
Murray, Janet Y. (1995), "Patterns in domestic vs. international strategic alliances: An investigation of U.S. multinational firms," Multinational Business Review; Fall 1995; 3, 2, 3 (2), 7-16.

Murray, Janet Y., Masaaki Kotabe, and Stanford A. Westjohn (2009), "Global sourcing strategy and performance of knowledge-intensive business services: A two-stage strategic fit model," Journal of International Marketing, 17 (4), 90-105.

Murugiah, Surin (2011), "Malaysia retains position as third most attractive offshoring destination," in The Edge. Kuala Lumpur, Malaysia.

Nahapiet, Janine and Sumantra Ghoshal (1998), "Social capital, intellectual capital and the organizational advantage," Academy of Management Review, 23 (2), 242-66.
Nakata, Cheryl and K. Sivakumar (2001), "Instituting the marketing concept in a multinational setting: The role of national culture," Journal of the Academy of Marketing Science, 29 (3), 255-75.

Nelson, Richard R. and Sidney G. Winter (1982), An evolutionary theory of economic change, Harvard University: Cambridge, MA. Cambridge, MA.: Harvard University.

Ngui, Y K Clarence (2003), "The automotive industry in Thailand and the Asean connection." Kuala Lumpur: Malaysian Business.

Nonaka, I., R. Toyama, and A. Nagata (2000a), "A firm as a knowledge-creating entity: a new perspective on the theory of the firm," Industrial & Corporate Change, 9 (1), 1.

Nonaka, Ikujiro (1994), "A dynamic theory of organizational knowledge creation," Organization Science, 5 (1), 14-37.

---- (1991), "The knowledge-creating company," Harvard Business Review, 69 (6), 96-104.

---- (2007), "The knowledge-creating company," Harvard Business Review, 85 (7/8), 162-71.

Nonaka, Ikujiro and Hirotaka Takeuchi (1995), The knowledge creating company: How Japanese companies create the dynamics of innovation. Oxford: Oxford University Press.

---- (1996), "A theory of organizational knowledge creation," International Journal of Technology Management, 11 (7/8), 833.

Nonaka, Ikujiro, Ryoko Toyama, and Noboru Konno (2000b), "SECI, ba and leadership: a unified model of dynamic knowledge creation," Long Range Planning, 33 (1), 5-34.

Nonaka, Ikujiro and Georg von Krogh (2009), "Tacit knowledge and knowledge conversion: Controversy and advancement in organizational knowledge creation theory," Organization Science, 20 (3), 635-52.

Nooteboom, Bart (2000), "Learning by interaction: absorptive capacity, cognitive distance and governance " Journal of Management and Governance, 4, 69-92.

Nunally, Jum C. and Ira H. Bernstein (1994), Psychometric Theory (3rd ed.). Now York: McGraw-Hill.

Nunnally, Jum C. (1978), Psychometric Theory. New York: McGraw-Hill.

O'Leary-Kelly, Scott W. and Robert J. Vokurka (1998), "The empirical assessment of construct validity," Journal of Operations Management, 16 (4), 387-405.

Ouyang, Hongwu (2008), "Resources, absorptive capacity, and technology sourcing," International Journal of Technology Management, 41 (1/2), 183-202.

Oyeleran-Oyeyinka, Banji (2004), "Learning, knowledge and skills: implications for firm-level performance in African industry," International Journal of Technology Management & Sustainable Development, 3 (2), 91-113.

Pahlberg, Cecilia and Peter Thilenius (2005), "Opportunity development for ongoing business relationships," in Managing Opportunity Development in Business Networks, Pervez Ghauri and Amjad Hadjikhani and Jan Johanson, Eds. Basingstoke, Hampshire: Palgrave Macmillan.

Park, Byung Il (2010), "What matters to managerial knowledge acquisition in international joint ventures? High knowledge acquirers versus low knowledge acquirers," Asia Pacific Journal of Management, 27 (1), 55-79.

Paulraj, Antony and Injazz J. Chen (2005), "Strategic supply management and dyadic quality performance: A path analytical model," Journal of Supply Chain Management: A Global Review of Purchasing & Supply, 41 (3), 4-18.

Petersen, Kenneth J., David J. Frayer, and Thomas V. Scannell (2000), "An empirical investigation of global sourcing strategy effectiveness," Journal of Supply Chain Management: A Global Review of Purchasing & Supply, 36 (2), 29-38.

Phatak, A., P.M. Reilly, and A. Penlidis (1993), "An approach to interval estimation in partial least squares regression " Analyrica Chimica Acta, 277, 495-501.

Pisano, Vincenzo, R. Duane Ireland, Michael A. Hitt, and Justin W. Webb (2007), "International entrepreneurship in emerging economies: The role of social capital, knowledge development and entrepreneurial actions," International Journal of Technology Management, 38 (1/2), 11-28.

Podsakoff, Philip M., Scott B. MacKenzie, Lee Jeong-Yeon, and Nathan P. Podsakoff (2003), "Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies," Journal of Applied Psychology, 88 (5), 879.

Podsakoff, Philip M. and Dennis W. Organ (1986), "Self-Reports in Organizational Research: Problems and Prospects," Journal of Management, 12 (4), 531.

Polanyi, Michael (1958), Personal knowledge. London: Routledge.

---- (1967), The tacit dimension. London: Routledge & Kegan Paul.
---- (1966), The tacit dimension. London: Routledge & Kegan Paul

Powell, Walter W., Kenneth W. Koput, and Laurel Smith-Doerr (1996), "Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology," Administrative Science Quarterly, 41 (1), 116-45.

Presutti, Manuela, Cristina Boari, and Luciano Fratocchi (2007), "Knowledge acquisition and the foreign development of high-tech start-ups: A social capital approach," International Business Review, 16 (1), 23-46.

Prusak, Laurence (2006), "The world is round," Harvard Business Review, 84 (4), 18-20.

Puah, Chiew Wei and Yuen May Choo (2008), "Palm biodiesel development and its social and environment impacts in Malaysia," in Policy Dialogue on Biofuels in Asia: Benefits and Challenges. Beijing, China.

Puhakka, Vesa (2006), "Effects of social capital on the opportunity recognition process," Journal of Enterprising Culture, 14 (2), 105-24.

Raj, Suraj (2007), "Bullish outlook for consumer electronics," in The Star. Petaling Jaya, Malaysia.

Richards, Malika and Donna Marie De Carolis (2003), "Joint venture research and development activity: An analysis of the international biotechnology industry," Journal of International Management, 9 (1), 33.

Robins, James A., Stephen Tallman, and Karin Fladmoe-Lindquist (2002), "Autonomy and dependence of international coorperative ventures: An exploration of the strategic performance of U.S. ventures in Mexico," Strategic Management Journal, 23 (10), 881-901.

Rodriguez, Sonia Dasi, Juan Francisco Martinez Perez, and Manuela Pardo del Val (2003), "An empirical study about the effect of cultural problematic on organizational learning in alliances," The Learning Organization, 10 (3), 138-48.
Ryan, William P. (1999), "The new landscape for nonprofits," Harvard Business Review, 77 (1), 127-36.

Salkind, Neil J. (2003), Exploring research (5 ed.). Upper Saddle, New Jersey: Prentice Hall.

---- (2008), Statistics for people who (think they) hate statistics (3rd ed.). Los Angeles, California: Sage Publications.

Saloma-Akpedonu, Czarina (2008), "Malaysian technological elite: Specifics of a knowledge society in a developing country," Perspectives on Global Development & Technology, 7 (1), 1-14.

Saxton, Todd (1997), "The effect of partner and relationship characteristics on alliance outcomes," Academy of Management Journal, 40 (2), 443-61.

Schniederjans, Marc J. and Kathryn M. Zuckweiler (2004a), "A quantitative approach to the outsourcing-insourcing decision in an international context," Management Decision, 42 (8), 974-86.

---- (2004b), "A quantitative approach to the outsourcing - insourcing decision in an international context," Management Decision, 42 (8), 974-86.

Schumpeter, J. (1934), Theory of Economic Development Cambridge, MA: Harvard University Press.

Schweinsberg, Christie, Mack Chrysler, and William Diem (2006), "Proton struggles as industry loses ground. (cover story)," Ward's Auto World, 42 (11), 38-38.

Sen, Rahul and M. Shahidul Islam (2005), "Southeast Asia in the global wave of outtsourcing: trends, opportunities and challenges " Regional Outlook, 75-79.

Shenkar, Oded (2001), "Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences," Journal of International Business Studies, 32 (3), 519.

Si, Steven X. and Garry D. Bruton (2005), "Knowledge acquisition, cost savings, and strategic positioning: Effects on Sino-American IJV performance," Journal of Business Research, 58 (11), 1465-73.

Sidhu, Jagdev Singh (2009), "Proton and Perodua joining forces?," in The Star. Kuala Lumpur.

Simonin, Bernard L. (1999), "Ambiguity and the process of knowledge transfer in strategic alliances," Strategic Management Journal, 20 (7), 595-623.

Singh, Mammohan (2006), "The Malaysian experience." Geneva: UNCTAD.

Skarmeas, Dionisis, Constantine S. Katsikeas, and Bodo B. Schlegelmilch (2002), "Drivers of commitment and its impact on performance in cross-cultural buyer-seller relationships: The importer's perspective," Journal of International Business Studies, 33 (4), 757-83.

Skarmeas, Dionysis and Matthew J. Robson (2008), "Determinants of relationship quality in importerâ€“exporter relationships," British Journal of Management, 19 (2), 171-84.

Soosay, Claudine and Paul Hyland (2008), "Managing knowledge transfer as a strategic approach to competitive advantage," International Journal of Technology Management, 42 (1/2), 143-57.

Spekman, Robert E., Joseph Spear, and John Kamauff (2002), "Supply chain competency: Learning as a key component," Supply Chain Management: An International Journal, 7 (1), 42-55.

Spender, J. C. and Robert M. Grant (1996), "Knowledge and the firm: Overview," Strategic Management Journal, 17, 5-9.

Srivastava, Shirish C. (2009), "Vendor's persective on social capital and absorptive capacity for offshore contract performance," Academy of Management Proceedings, 1-6.

St-Jean, Etienne and Maripier Tremblay (2011), "Opportunity recognition for novice entrepreneurs: The benefits of learning with a mentor " Academy of Entrepreneurship Journal, 17 (2), 37-48.

Star, The (2009), "The long winding road," in The Star. Kuala Lumpur, Malaysia.

Subramaniam, Mohan and N. Venkatraman (2001), "Determinants of transnational new product development capability: Testing the influence of transferring and deploying tacit overseas knowledge," Strategic Management Journal, 22 (4), 359-78.

Szulanski, Gabriel (1996), "Exploring internal stickiness: Impediments to the transfer of best practice within the firm " Strategic Management Journal, 17, 27-43.

Teece, David J. (1998), "Capturing value from knowledge assets: the new economy, markets for know-how and intangible assets," California Management Review, 40 (3), 55-79.

---- (1981), "The multinational enterprise: market failure and market power considerations," Sloan Management Review, 22 (3), 3-17.

Teece, David J., Gary Pisano, and Amy Shuen (1997), "Dynamic capabilities and strategic management," Strategic Management Journal, 18 (7), 509-33.

Teoh, Cheng Hai (2002), "The palm oil industry in Malaysia: from seed to frying pan," WWF Switzerland.

Tham, Siew Yean and Kian Teng Kwek (2007), "Prosper-thy-neighbour policies: Malaysia's contributions after the Asian financial crisis," ASEAN Economic Bulletin, Vol. 24 (1), 72-97.

Thompson, Ronald L. and Christopher A. Higgins (1991), "Personal computing: Toward a conceptual model of utilization," MIS Quarterly, 15 (1), 125-43.

Thuc Anh, Phan Thi, C. Christopher Baughn, Ngo Thi Minh Hang, and Kent E. Neupert (2006), "Knowledge acquisition from foreign parents in international joint ventures: An empirical study in Vietnam," International Business Review, 15 (5), 463-87.

Tidd, Joseph and Michael Brocklehurst (1999), "Routes to technological learning and development: An assessment of Malaysia's innovation policy and performance," Technological Forecasting and Social Change, 62 (3), 239-57.

Tihanyi, Laszlo, David A. Griffith, and Craig J. Russell (2005), "The effect of cultural distance on entry mode choice, international diversification, and MNE performance: A meta-analysis," Journal of International Business Studies, 36 (3), 270-83.

Ting, Kueh Soon (2001), "An overview of the ASEAN oleochmeical market," Malaysian Oil Science and Technology, 10 (2).

Tippu, Sufia (2008), "Malaysian semiconductor foundries find niches," Electronic Engineering Times (1533), 21-22.

Trent, Robert J. and Robert M. Monczka (1999), "Achieving world-class supplier quality," Total Quality Management, 10 (6), 927-38.

Tsai, Wenpin (2001), "Knowledge transfer in interorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance " Academy of Management Journal, 44 (5), 996-1004.

Tsang, Eric W. K., Duc Tri Nguyen, and M. Krishna Erramilli (2004), "Knowledge acquisition and performance of international joint ventures in the transition economy of Vietnam," Journal of International Marketing, 12 (2), 82-103.

Ulrich, Dave and Norm Smallwood (2004), "Capitalizing on capabilities," Harvard Business Review.

Uzzi, Brian (1997), "Social structure and competition in interfirm networks: The paradox of embeddedness," Administrative Science Quarterly, 42 (1), 35-67.

Van Wijk, Raymond, Justin Jansen, and Marjorie Lyles (2007), "Organizational knowledge transfer: A meta-analytic of its antecedents and outcomes " in Academy of Management Proceedings: Academy of Management.

Verwaal, Ernst, Antonio J. Verdu, and Arthur Recter (2008), "Transaction costs and organisational learning in strategic outsourcing relationships," International Journal of Technology Management, 41 (1/2), 38-54.

Von Hippel, Eric (1988), The Sources of Innovation. New York: Oxford University Press.

---- (1994), ""Sticky Information" and the locus of problem solving: Implications for innovation," Management Science, 40 (4), 429-39.

Voss, Kevin E., Jean L. Johnson, John B. Cullen, Tornoaki Sakano, and Hideyuki Takenouchi (2006), "Relational exchange in US-Japanese marketing strategic alliances," International Marketing Review, 23 (6), 610-35.

Vries, Roy J. de (1984), "Utilization of Malaysian palm oil and palm kernel oil for fatty acids and derivatives " Journal of the American Oil Chemists' Society, 61 (2), 404-07.

Wang, Pien, Tony W. Tong, and Chun Peng Koh (2004), "An integrated model of knowledge transfer from MNC parent to China subsidiary," Journal of World Business, 39 (2), 168.

Webb, Lisa and Justin Laborde (2005), "Crafting a successful outsourcing vendor/client relationship," Business Process Management Journal, 11 (5), 437-43.

Weidenbaum, Murray (2005), "Outsourcing: Pros and cons," Business Horizons, 48 (4), 311-15.

Wernerfelt, Birger (1984), "A resource-based view of the firm," Strategic Management Journal, 5 (2), 171-80.

Wetzels, Martin, Gaby Odekerken-Schrader, and Claudia van Oppen (2009), "Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration," MIS Quarterly, 33 (1), 177-95.

Wilcox, Rand R. (1998), "How many discoveries have been lost by ignoring modern statistical methods?," in American Psychologist. 53 ed.

Williams, Jerome D., Jerome D. Sang-Lin Han, and William J. Qualls (1998), "A conceptual model and study of cross-cultural business relationships," Journal of Business Research, 42 (2), 135-43.

Wilson, Elizabeth J. and Charles C. Nielson (2001), "Cooperation and continuity in strategic business relationships," Journal of Business-to-Business Marketing, 8 (1), 1.

Winter, Sidney G. (1987), "Knowledge and competence as strategic assets.," in The Competitive Challenge - Strategies for Industrial Innovation and Renewal, David J. Teece, Ed. Cambridge, Massachusetts: Ballinger

Wold, Svante, Michael Sjostroma, and Eriksson. Lennart (2001), "PLS-regression: A basic tool of chemometrics," Chemometrics and Intelligent Laboratory Systems 58, 109-30.

Yamin, Mohammad and Rudolf R. Sinkovics (2006), "Online internationalization, psychic distance reduction and the virtuality trap," International Business Review, 15 (4), 339-60.

Yang, Shu-Chen and Cheng-Kiang Farn (2009), "Social capital, behavioural control, and tacit knowledge sharingâ€"A multi-informant design," International Journal of Information Management, 29 (3), 210-18.

Yin, Eden and Yongjian Bao (2006), "The acquisition of tacit knowledge in China: An empirical analysis of the 'supplier-side individual level' and 'recipient-side' factors," Management International Review (MIR), 46 (3), 327-48.

Yli-Renko, Helena, Erkko Autio, and Harry J. Sapienza (2001), "Social capital, knowledge acquisition and knowledge exploitation in young technology-based firms " Strategic Management Journal, 22 (6/7), 587-613.

Zaheer, Akbar, Bill McEvily, and Vincenzo Perrone (1998), "Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance," Organization Science, 9 (2), 141-59.

Zahra, Shaker A. and Gerard George (2002), "Absorptive capacity: a review, reconceptualization and extension," Academy of Management Review, 27 (2), 185-203.

Zahra, Shaker A. and James C. Hayton (2008), "The effect of international venturing on firm performance: The moderating influence of absorptive capacity," Journal of Business Venturing, 23 (2), 195-220.

Zahra, Shaker A., R. Duane Ireland, and Michael A. Hitt (2000), "International expansion by new venture firms: international diversity, mode of market entry, technological learning and performance " Academy of Management Journal, 43 (5), 925-50.

Zander, Udo and Bruce Kogut (1995), "Knowledge and the speed of the transfer and imitation of organizational capabilities: An empirical test," Organization Science, 6 (1), 76-92.

Zhou, Kevin Zheng, Laura Poppo, and Yang Zhilin (2008), "Relational ties or customized contracts? An examination of alternative governance choices in China," Journal of International Business Studies, 39 (3), 526-34.

Zollo, Maurizio and Sidney G. Winter (2002), "Deliberate Learning and the Evolution of Dynamic Capabilities," Organization Science, 13 (3), 339-51.

APPENDIX 1
Letter and Questionnaire

The University of Manchester

Manchester Business School
The University of Manchester
Booth Street West
Manchester M15 6PB
United Kingdom
+44(0)161 306 1320
www.mbs.ac.uk

July 16, 2008

Dear Mr. Vincent,

Tacit Knowledge Acquisition in International Outsourcing Relationship: The Malaysian Supplier Perspective

I am a lecturer at Universiti Utara Malaysia, and now pursuing my doctoral study at Manchester School of Business, University of Manchester. Currently, I am engaged in a doctoral research initiative, investigating how Malaysian manufacturing suppliers acquire tacit knowledge from their foreign buyers, and how the tacit knowledge acquired affect these firms' capability and future opportunity recognition.

As a manufacturing supplier that involves in international outsourcing relationship with a foreign buyer, your company has been selected to participate and provide input on this topic through the attached questionnaire. Listed are some of the highlights:

What is tacit knowledge acquisition?
A process in which a supplier obtains and learns tacit knowledge from its foreign buyer. Tacit knowledge is defined as accumulated knowledge, experience and skill that you obtain when you interact, communicate, socialize and work with your foreign buyer. Tacit knowledge cannot be learned and acquired through any written form. It can only be learned through observation, work experience and learning-by-doing. Examples of tacit knowledge; technical skills, soft skills and practical experience.

Who should answer this survey?
The company's top level management, managers or engineers who have been involved in the collaboration, management or operational process with your company's foreign buyers.

Why they are the best sources?
Through interaction and communication with the foreign buyers, they have the ability and opportunity to gain information, knowledge and skill from your foreign counterparts. Thus, as one of the above-mentioned individuals, you have been recognized as the most suitable person to provide valuable inputs about the acquisition of tacit knowledge from your company's foreign buyer.

What if you are not involved in any international outsourcing relationship?
Please provide your best estimate if unsure of a specific response. If you think that someone else in your firm is more informed to participate and complete the survey, please forward the enclosed questionnaire to the appropriate person.

Suggestions and feedbacks
You are welcomed to give your suggestions on the provided spaces or drop your feedbacks on any sections in the questionnaire. All information you provide will remain anonymous and will be completely confidential and highly regarded.

Return deadline
Please complete this questionnaire and return it directly to me using the enclosed postage-paid envelope. I would highly appreciate if you could return the questionnaire before **August 20, 2008**. If you would like a summary of the results, please include your business card within the return envelope.

Thank you in advance for your assistance. Your participation is very much appreciated. If you have any questions, please contact me at **019-551-7326** or **safinas@uum.edu.my.**

Sincerely,

(NORSAFINAS MD. SAAD)
INTERNATIONAL BUSINESS DEPARTMENT
COLLEGE OF BUSINESS
UNIVERSITI UTARA MALAYSIA
06010 SINTOK
KEDAH DARUL AMAN

LUCKY DRAW !!!

Recognizing that your time is very valuable, you are provided with the opportunity to win valuable prizes. This is my way of saying thanks for your participation in this study.

Everyone who returns the completed questionnaire with a postmark earlier than 20th August 2008 is eligible for a lucky draw. Six winners will be drawn for the following prizes:

Grand Prize
Nike Manchester United Soccer Jersey (original) – for 2 lucky winners.

Other Prizes
Starbucks Gift Certificates (worth RM30 each) – for 5 lucky winners.

To qualify for one of these prizes, please fill out your details on the slip attached below and return it with your completed questionnaire.

✂----------

Name:_____
Tel No: _____
Email Address: _____

A SURVEY ON THE ACQUISITION OF TACIT KNOWLEDGE IN INTERNATIONAL OUTSOURCING RELATIONSHIP: THE MALAYSIAN SUPPLIER PERSPECTIVE

What is 'tacit knowledge'?

Accumulated knowledge, experience and skills that you obtain from your foreign buyer when you interact, communicate, socialize and work with them. It cannot be learned and acquired through any written form. It can only be learned through observation, work experience and learning-by-doing. Examples of tacit knowledge: technical skills, soft skills and practical experience.

The purpose of the study

To examine how Malaysian suppliers acquire tacit knowledge from their foreign buyers and evaluate the implications of tacit knowledge acquisition on the suppliers' capability enhancement and opportunity recognition.

Reminder

Please refer your answer to a single foreign buyer that comes closest to these attributes.

Instruction

Please answer by circling the appropriate number

SECTION 1: PRIOR RELATED KNOWLEDGE

To what extent you agree or disagree about the quality of your company's staff and their abilities to gain new knowledge from your foreign buyer?		*Strongly Disagree* →						*Strongly Agree*
1.	Our company staff are equipped with excellent professional knowledge	1	2	3	4	5	6	7
2.	Our company staff can acquire quickly and thoroughly new knowledge required by the work they do	1	2	3	4	5	6	7
3.	Our company staff have good working skills	1	2	3	4	5	6	7
4.	Our company staff have high educational qualifications	1	2	3	4	5	6	7
5.	Our company staff are able to understand and organize the acquired knowledge	1	2	3	4	5	6	7

SECTION 2: BUSINESS RELATEDNESS

Please indicate the extent to which you agree or disagree about the similarity of your company's business and your foreign buyer's business orientation.		*Strongly Disagree* →						*Strongly Agree*
1.	Our technology is related to that of our foreign buyer	1	2	3	4	5	6	7
2.	Our product is related to that of our foreign buyer	1	2	3	4	5	6	7
3.	Our industry is related to that of our foreign buyer	1	2	3	4	5	6	7
4.	Our customers are related to that of our foreign buyer	1	2	3	4	5	6	7
5.	Our skill base is related to that of our foreign buyer	1	2	3	4	5	6	7

What is tacit knowledge?

Accumulated knowledge, experience and skills that you obtain from your foreign buyer when you interact, communicate, socialize and work with them. Examples of tacit knowledge: technical skills, soft skills and practical experience. It cannot be learned and acquired through any written form. It can only be learned through observation, work experience and learning-by-doing.

SECTION 3: INTERACTIVE INVOLVEMENT

	How often does your company use the following interactive involvement methods in its effort to learn tacit knowledge from your foreign buyer?	*Never*		*Sometimes*			*Always*	
1	We conduct on-site visits and tours to our foreign buyer's facility to increase our awareness on how their product is produced and used	1	2	3	4	5	6	7
2	Our foreign buyer provides us with trainings and educational programs	1	2	3	4	5	6	7
3	Our foreign buyer provides us with performance feedback	1	2	3	4	5	6	7
4	Our foreign buyer visits our facility to help us improve our performance	1	2	3	4	5	6	7
5	Our managers and foreign managers work together at our facility	1	2	3	4	5	6	7
6	Our foreign buyer and we conduct structured meetings from time to time	1	2	3	4	5	6	7
7	Our foreign buyer and we engage in joint problem solving	1	2	3	4	5	6	7
8	Our foreign buyer and we engage in technology sharing	1	2	3	4	5	6	7

SECTION 4: TRUST

	How much do you agree or disagree with the following statements regarding trust in the relationship between your company and the foreign buyer?	*Strongly Disagree*					*Strongly Agree*	
1	In this business relationship, we keep promises we make to each other	1	2	3	4	5	6	7
2	Both parties are always honest with each other	1	2	3	4	5	6	7
3	Each party believes the information provided by each other	1	2	3	4	5	6	7
4	Both parties are genuinely concerned that the other's business succeeds	1	2	3	4	5	6	7
5	When making important decisions, both parties consider each other's welfare as well as their own	1	2	3	4	5	6	7
6	We trust both parties keep each other's best interests in mind	1	2	3	4	5	6	7
7	We both find each other trustworthy	1	2	3	4	5	6	7
8	There is no reason for both parties to be suspicious of one another	1	2	3	4	5	6	7

What is tacit knowledge?

Accumulated knowledge, experience and skills that you obtain from your foreign buyer when you interact, communicate, socialize and work with them. Examples of tacit knowledge: technical skills, soft skills and practical experience. It cannot be learned and acquired through any written form. It can only be learned through observation, work experience and learning-by-doing.

SECTION 5: INTERACTION

Please indicate your agreement or disagreement in describing how your company interacts with the foreign buyer.		*Strongly Disagree* →						*Strongly Agree*
1.	We share sensitive information (financial, production, design, research or competition)	1	2	3	4	5	6	7
2.	We provide any information and new developments that might help each other	1	2	3	4	5	6	7
3.	We exchange information frequently, informally and in a timely manner	1	2	3	4	5	6	7
4.	We keep each other informed about events and changes that may affect the other party	1	2	3	4	5	6	7
5.	We have frequent face-to-face planning and communication	1	2	3	4	5	6	7
6.	We exchange performance feedback	1	2	3	4	5	6	7

SECTION 6: SENSITIVITY TO BUYER'S NATIONAL BUSINESS CULTURE

To what extent you agree or disagree with the following statements about your company's sensitivity to the national business culture of your foreign buyer?		*Strongly Disagree* →						*Strongly Agree*
1.	We understand how buyers and suppliers conduct business in our foreign buyer's country	1	2	3	4	5	6	7
2.	We are willing to adapt to the way our foreign buyer conducts business	1	2	3	4	5	6	7
3.	We are sensitive to the difficulties our foreign buyer encounters when doing business with Malaysian suppliers	1	2	3	4	5	6	7
4.	We are aware of how our foreign buyer conducts business inside their own country	1	2	3	4	5	6	7

SECTION 7: TACIT KNOWLEDGE ACQUISITION

What is tacit knowledge?

Accumulated knowledge, experience and skills that you obtain from your foreign buyer when you interact, communicate, socialize and work with them. Examples of tacit knowledge: technical skills, soft skills and practical experience. It cannot be learned and acquired through any written form. It can only be learned through observation, work experience and learning-by-doing.

	Please indicate to what extent your company has learned the following tacit knowledge from your foreign buyer.	*Strongly Disagree* →						*Strongly Agree*
1	We have learned about the technological expertise from our foreign buyer	1	2	3	4	5	6	7
2	We have learned about the manufacturing processes from our foreign buyer	1	2	3	4	5	6	7
3	We have learned about the product development expertise from our foreign buyer	1	2	3	4	5	6	7
4	We have learned about the marketing expertise from our foreign buyer	1	2	3	4	5	6	7
5	We have learned about the foreign culture and tastes from our foreign buyer	1	2	3	4	5	6	7
6	We have learned about the managerial techniques from our foreign buyer	1	2	3	4	5	6	7

SECTION 8: CAPABILITY ENHANCEMENT

	To what extent has your company enhanced its capability through the business relationship with your foreign buyer?	*Strongly Disagree* →						*Strongly Agree*
1	Our company has improved its ability to anticipate potential market opportunities for new products	1	2	3	4	5	6	7
2	Our company has improved its ability to rapidly commercialize new innovations	1	2	3	4	5	6	7
3	Our company has improved its ability to anticipate surprises and crises	1	2	3	4	5	6	7
4	Our company has improved its ability to quickly adapt its goals and objectives to industry changes	1	2	3	4	5	6	7
5	Our company has improved its ability to decrease market response times	1	2	3	4	5	6	7
6	Our company has improved its ability to be responsive to new market demands	1	2	3	4	5	6	7
7	Our company has improved its ability to streamline its internal processes	1	2	3	4	5	6	7

What is tacit knowledge?

Accumulated knowledge, experience and skills that you obtain from your foreign buyer when you interact, communicate, socialize and work with them. Examples of tacit knowledge: technical skills, soft skills and practical experience.

Tacit knowledge cannot be learned and acquired through any written form. It can only be learned through observation, work experience and learning-by-doing.

SECTION 11: OPPORTUNITY RECOGNITION

	Please indicate the extent to which you agree or disagree with the following statements regarding the importance of your foreign buyer on the potential business opportunity of your company.	*Strongly Disagree* →						*Strongly Agree*
1	Our foreign buyer is important to us concerning market activities	1	2	3	4	5	6	7
2	Our foreign buyer is important to us concerning information about new and important business contacts	1	2	3	4	5	6	7
3	Our foreign buyer is important to us concerning product development	1	2	3	4	5	6	7
4	Our foreign buyer has caused us an adaptation concerning product technology	1	2	3	4	5	6	7
5	Our foreign buyer is important to us concerning production development	1	2	3	4	5	6	7
6	Our foreign buyer has caused us an adaptation concerning production technology	1	2	3	4	5	6	7
7	Our foreign buyer is important to us concerning technological information	1	2	3	4	5	6	7

SECTION 12: GENERAL INFORMATION

Please fill in the blanks and 'x' where appropriate.

1. **Which country is your main foreign buyer originated from?**

   _____

3. **How long has your company worked with this foreign buyer?**

   _____years

2. **Which category best describe the products sold/supplied to this foreign buyer?**

Raw materials	☐
Components	☐
Subassemblies	☐
Finished products	☐
Others, please specify _____	☐

4. Your company's estimated annual revenues (RM millions)

Less than 10 million	☐
10 – 50 millions	☐
50 – 100 millions	☐
100 – 150 million	☐
150 – 200 millions	☐
More than 200 millions	☐

Please specify_____

5. Your company's estimated number of employees

Less than 100	☐
100 – 500	☐
500 – 1,000	☐
1,000 – 1,500	☐
1,500 – 2,000	☐
More than 2,000	☐

Pease specify_____

6. Which sector is your company mainly involved in? (Please choose one only)

Electrics and electrical	☐
Chemical	☐
Automobile	☐
Petroleum	☐
Industrial and Commercial Machinery	☐

Others, please specify _____

7. Please mark your current position.

President/Vice President/Chairman	☐
CEO	☐
Director	☐
Manager	☐
Engineer	☐
Executive	☐

Others, please specify_____

8. Please mark which functional area best represents your current responsibilities

	☐
Management	☐
Sales/Marketing	☐
Procurement/Logistics	☐
Production/Operation	☐
R&D	☐

Others,please specify_____

9. Please mark your highest educational qualification.

	☐
Certificate	☐
Diploma	☐
Bachelor Degree	☐
Masters Degree	☐
Doctorate	☐

Others,please specify_____

SUGGESTIONS AND FEEDBACKS:

_____

_____

_____

_____

Please return your responses using the enclosed postage-paid envelope. If you would like a summary of the results, please include your business card within the return envelope.
Thank you very much for your time. Your real world input is extremely valuable.

APPENDIX 2

Reliability Tests (Pilot Study)

Scale: PRIOR

Case Processing Summary

		N	%
Cases	Valid	38	100.0
	Excluded[a]	0	.0
	Total	38	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.810	5

Scale:RELATEDNESS

Case Processing Summary

		N	%
Cases	Valid	38	100.0
	Excluded[a]	0	.0
	Total	38	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.877	6

Scale: METHOD

Case Processing Summary

		N	%
Cases	Valid	38	100.0
	Excluded[a]	0	.0
	Total	38	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.891	8

Scale: TRUST

Case Processing Summary

		N	%
Cases	Valid	38	100.0
	Excluded[a]	0	.0
	Total	38	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.934	8

Scale: INTERACTION

Case Processing Summary

		N	%
Cases	Valid	38	100.0
	Excluded[a]	0	.0
	Total	38	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.839	6

Scale: CULTURE

Case Processing Summary

		N	%
Cases	Valid	38	100.0
	Excluded[a]	0	.0
	Total	38	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.836	4

Scale: TACIT

Case Processing Summary

		N	%
Cases	Valid	38	100.0
	Excluded[a]	0	.0
	Total	38	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.936	6

Scale: CAPABILITY

Case Processing Summary

		N	%
Cases	Valid	38	100.0
	Excluded[a]	0	.0
	Total	38	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.947	7

Scale: OPPORTUNITY

Case Processing Summary

		N	%
Cases	Valid	38	100.0
	Excluded[a]	0	.0
	Total	38	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.944	7

Appendix 3

Reliability Test (Actual – Before Weak Items Were Removed)

Scale: PRIOR

Reliability Statistics

Cronbach's Alpha	N of Items
.802	5

Case Processing Summary

		N	%
Cases	Valid	122	100.0
	Excluded[a]	0	.0
	Total	122	100.0

a. Listwise deletion based on all variables in the procedure.

Scale: RELATEDNESS

Case Processing Summary

		N	%
Cases	Valid	122	100.0
	Excluded[a]	0	.0
	Total	122	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.874	6

Scale: METHOD

Case Processing Summary

		N	%
Cases	Valid	122	100.0
	Excluded[a]	0	.0
	Total	122	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.848	8

Scale: TRUST

Case Processing Summary

		N	%
Cases	Valid	122	100.0
	Excluded[a]	0	.0
	Total	122	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.919	8

Scale: INTERACTION

Case Processing Summary

		N	%
Cases	Valid	122	100.0
	Excluded[a]	0	.0
	Total	122	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.839	6

Scale: CULTURE

Case Processing Summary

		N	%
Cases	Valid	122	100.0
	Excluded[a]	0	.0
	Total	122	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.863	4

Scale: TACIT

Case Processing Summary

		N	%
Cases	Valid	122	100.0
	Excluded[a]	0	.0
	Total	122	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.892	6

Scale: OPPORTUNITY

Case Processing Summary

		N	%
Cases	Valid	122	100.0
	Excluded[a]	0	.0
	Total	122	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.900	7

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	121	99.2
	Excluded[a]	1	.8
	Total	122	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.914	7

APPENDIX 4

T-Test analysis for non-response bias

Group Statistics

	EarlyLate	N	Mean	Std. Deviation	Std. Error Mean
Your company's estimated annual revenues	Early	30	2.5333	1.59164	.29059
	Late	30	2.4667	1.19578	.21832
Your company's estimated number of employees	Early	30	2.1667	1.14721	.20945
	Late	30	2.4667	1.22428	.22352
Which sector is your company involved in?	Early	30	2.0667	1.11211	.20304
	Late	30	1.9000	1.02889	.18785
Duration	Early	30	1.6667	.54667	.09981
	Late	30	1.9667	.66868	.12208

Independent Samples Test

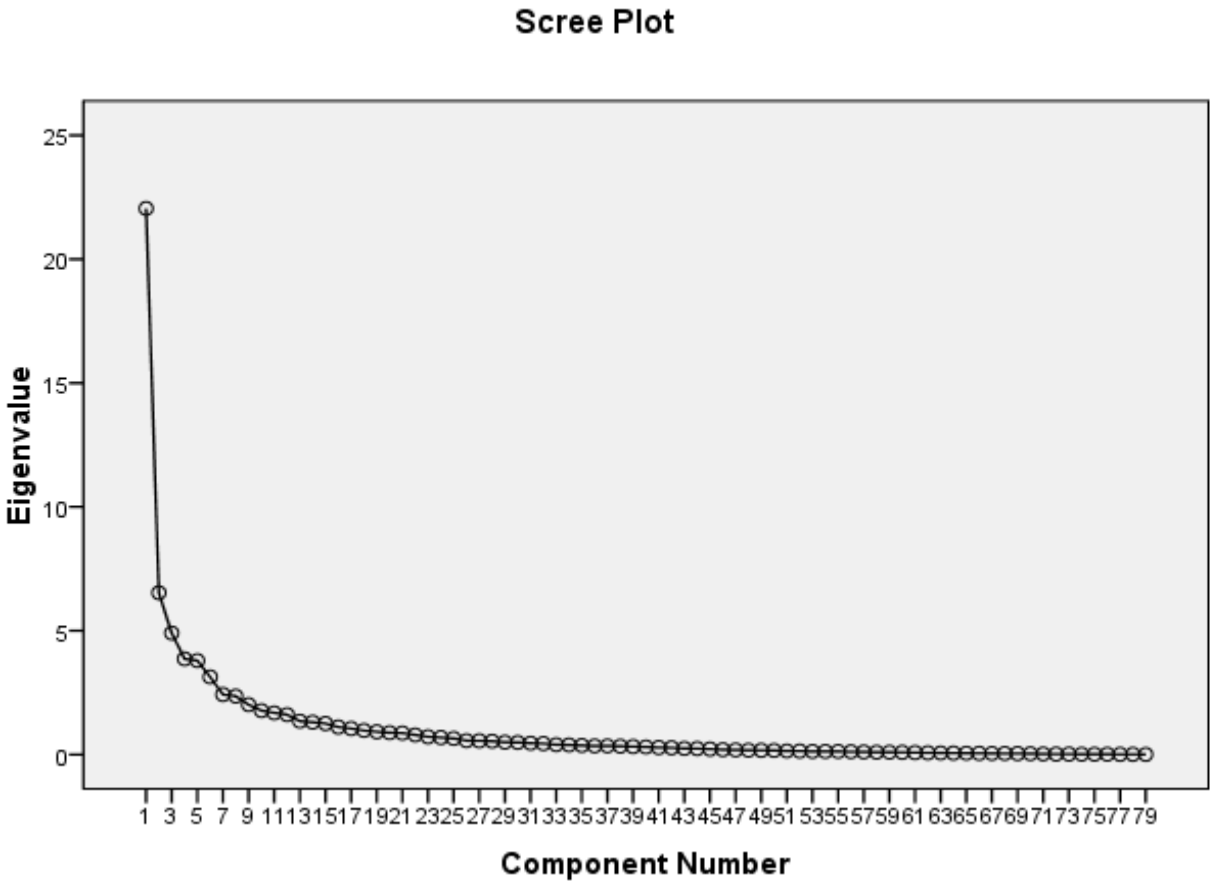
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Your company's estimated annual revenues	Equal variances assumed	2.080	.155	.183	58	.855	.06667	.36347	-.66089	.79422
	Equal variances not assumed			.183	53.827	.855	.06667	.36347	-.66209	.79542
Your company's estimated number of employees	Equal variances assumed	.567	.454	-.979	58	.331	-.30000	.30632	-.91316	.31316
	Equal variances not assumed			-.979	57.757	.331	-.30000	.30632	-.91322	.31322
Which sector is your company involved in?	Equal variances assumed	.588	.446	.603	58	.549	.16667	.27661	-.38703	.72036
	Equal variances not assumed			.603	57.653	.549	.16667	.27661	-.38710	.72043
Duration	Equal variances assumed	.149	.701	-1.902	58	.062	-.30000	.15769	-.61565	.01565
	Equal variances not assumed			-1.902	55.796	.062	-.30000	.15769	-.61592	.01592

Appendix 5

One factor test for common method variance

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.657
Bartlett's Test of Sphericity	Approx. Chi-Square	9943.685
	df	3081.000
	Sig.	.000



Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	22.047	27.908	27.908	22.047	27.908	27.908
2	6.532	8.269	36.176	6.532	8.269	36.176
3	4.905	6.209	42.386	4.905	6.209	42.386
4	3.865	4.892	47.278	3.865	4.892	47.278
5	3.791	4.799	52.076	3.791	4.799	52.076
6	3.133	3.965	56.041	3.133	3.965	56.041
7	2.425	3.069	59.111	2.425	3.069	59.111
8	2.357	2.984	62.094	2.357	2.984	62.094
9	2.015	2.551	64.646	2.015	2.551	64.646
10	1.773	2.244	66.890	1.773	2.244	66.890
11	1.684	2.132	69.022	1.684	2.132	69.022
12	1.613	2.041	71.063	1.613	2.041	71.063
13	1.348	1.707	72.770	1.348	1.707	72.770
14	1.310	1.658	74.427	1.310	1.658	74.427
15	1.250	1.582	76.010	1.250	1.582	76.010
16	1.111	1.406	77.415	1.111	1.406	77.415
17	1.051	1.330	78.745	1.051	1.330	78.745
18	.970	1.228	79.973			
19	.919	1.163	81.137			
20	.879	1.113	82.250			
21	.868	1.099	83.349			
22	.794	1.005	84.354			
23	.716	.907	85.260			
24	.687	.869	86.130			
25	.649	.822	86.952			
26	.562	.712	87.663			
27	.554	.701	88.364			
28	.539	.682	89.047			
29	.497	.629	89.676			

30	.486	.615	90.291			
31	.460	.583	90.874			
32	.443	.561	91.435			
33	.399	.504	91.940			
34	.389	.493	92.432			
35	.365	.461	92.894			
36	.349	.442	93.335			
37	.344	.436	93.771			
38	.337	.427	94.198			
39	.321	.406	94.604			
40	.305	.386	94.990			
41	.283	.358	95.348			
42	.272	.344	95.692			
43	.244	.308	96.000			
44	.240	.304	96.303			
45	.222	.281	96.584			
46	.197	.250	96.834			
47	.184	.233	97.067			
48	.178	.225	97.291			
49	.171	.216	97.507			
50	.163	.206	97.714			
51	.147	.186	97.900			
52	.141	.178	98.078			
53	.127	.161	98.239			
54	.125	.158	98.397			
55	.124	.157	98.553			
56	.111	.141	98.694			
57	.104	.131	98.826			
58	.095	.121	98.946			
59	.091	.116	99.062			
60	.088	.111	99.173			
61	.079	.099	99.273			
62	.070	.088	99.361			

63	.063	.080	99.441			
64	.058	.074	99.515			
65	.052	.065	99.580			
66	.049	.062	99.642			
67	.042	.053	99.695			
68	.041	.051	99.746			
69	.038	.048	99.794			
70	.033	.041	99.835			
71	.026	.033	99.868			
72	.020	.026	99.894			
73	.020	.025	99.919			
74	.017	.021	99.940			
75	.014	.018	99.958			
76	.011	.014	99.972			
77	.009	.012	99.984			
78	.009	.011	99.995			
79	.004	.005	100.000			

Extraction Method: Principal Component Analysis.

APPENDIX 6

ANOVA Results Across the Supplier's Groups

Descriptives

MeanTKA

Industry		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	Between-Component Variance
						Lower Bound	Upper Bound			
Electrics and electrical		43	4.9225	.98356	.14999	4.6198	5.2252	3.00	6.00	
Chemical		32	5.1823	1.07710	.19041	4.7940	5.5706	2.50	7.00	
Automobile		25	5.3267	.77800	.15560	5.0055	5.6478	3.67	7.00	
Petroleum		22	4.8864	.83156	.17729	4.5177	5.2551	3.33	6.17	
Total		122	5.0669	.95073	.08607	4.8965	5.2373	2.50	7.00	
Model	Fixed Effects			.94619	.08566	4.8973	5.2366			
	Random Effects				.10225	4.7415	5.3923			.01165

ANOVA

MeanTKA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.727	3	1.242	1.388	.250
Within Groups	105.643	118	.895		
Total	109.370	121			

Descriptives

MeanTKA

Region		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	Between-Component Variance
						Lower Bound	Upper Bound			
Asia		57	4.9444	.93187	.12343	4.6972	5.1917	2.50	7.00	
Europe		30	5.2889	.90543	.16531	4.9508	5.6270	3.00	6.67	
North America		18	5.1296	1.15690	.27268	4.5543	5.7049	3.33	7.00	
Middle East		7	4.9048	.56811	.21473	4.3793	5.4302	3.67	5.33	
Africa		5	5.6333	.36132	.16159	5.1847	6.0820	5.17	6.00	
Oceania		5	4.5667	1.25610	.56174	3.0070	6.1263	3.33	6.00	
Total		122	5.0669	.95073	.08607	4.8965	5.2373	2.50	7.00	
Model	Fixed Effects			.94653	.08569	4.8972	5.2367			
	Random Effects				.10414	4.7992	5.3347			.01140

ANOVA

MeanTKA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.443	5	1.089	1.215	.306
Within Groups	103.927	116	.896		
Total	109.370	121			

Descriptives

MeanTKA

Duration		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	Between- Component Variance
						Lower Bound	Upper Bound			
1-5		43	4.8333	.92867	.14162	4.5475	5.1191	2.50	6.00	
6-10		57	5.1140	.95492	.12648	4.8607	5.3674	3.00	7.00	
11-25		22	5.4015	.90364	.19266	5.0009	5.8022	3.33	7.00	
Total		122	5.0669	.95073	.08607	4.8965	5.2373	2.50	7.00	
Model	Fixed Effects			.93680	.08481	4.8990	5.2349			
	Random Effects				.15112	4.4167	5.7172			.04171

ANOVA

MeanTKA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.936	2	2.468	2.812	.064
Within Groups	104.434	119	.878		
Total	109.370	121			